Clinical Lecture
ON
GELATINOUS DISEASE OF SYNOVIAL MEMBRANE.
(NEW OPERATION.)

Delivered Jan. 18th, 1876,

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GENTLEMEN,—I propose to-day to draw your attention to a disease which is very common under the age of puberty—I allude to gelatinous disease of the synovial membrane, popularly called "white swelling" when met with in the knee, but to which all joints are liable. It will be convenient to observe its progress in this joint because it is comparatively superficial, and its condition can therefore be readily appreciated by the senses of sight and touch. The onset and early stage are illustrated by the following case (reported by Mr. John Job, house-surgeon).

John L——, sixteen years of age, was admitted under Mr. Maunder's care on Nov. 30th, 1875. The patient states that until twelve months ago he was quite healthy; he then, one day, slipped from a ladder, and, in falling, caught his right leg between the bars. In this position he was suspended for two or three minutes. The accident caused him very trifling inconvenience at the time, and it was not until the following day that he noticed the knee to be swollen and stiff; but there was no acute pain. He did not rest the limb, but followed his occupation, that of a ploughboy, as usual. For six months, beyond a feeling of stiffness and an occasional sensation of heat, there was little to trouble the patient; his general health was good, and he slept well. Then the joint began to get painful, and he was obliged to give up work, and use a stick in getting about. He then came to the hospital. On admission, the patient, of light complexion and fairly nourished, said he had got thinner since the accident. The right knee was uniformly swollen, the natural elevations and depressions being concealed. It was hotter than the surrounding parts. To the touch the swelling was elastic, yielding a deceptive sense of fluctuation, and tender on pressure. The leg was slightly flexed, with inability to straighten it. Slight wasting of limb. Family history very good.

The history of this case then is often the history of many others: some slight accident, of which little notice is taken at the time, and which probably is never thoroughly recovered from. At the same time there are many instances in which it does appear to be spontaneous or of constitutional origin. From this point of view it is called strumous, a term which I understand to apply to a subacute or chronic form of inflammatory action tending in the direction of extensive cell-growth, degeneration, and suppuration (occasionally to fibrination), rather than to resolution. The disease affects two classes of patients indiscriminately—the delicate and the fair, with chiselled features, clear complexion, pearly sclerotic, and fine hair; the plain and unattractive, with ill-defined lineaments, thick skin, and coarse hair. Now this is very different to a scrofulous disease consequent on tubercle, and must not be confounded with it. Pathology tells us that the altered condition of the knee (for example), which had caused the absence of its natural hollows and elevations, is due to a mass of cells growing, some on the surface of the synovial membrane and towards the joint cavity, and others in the subsynovial tissue, and to such an extent as to encroach upon and even obliterate the joint-cavity, and to conceal the natural outline of the joint and to render it shapeless. Now these cells, when examined by the microscope, have all the appearance of granulation-cells, and, like them, under favourable circumstances, will become developed into fibrous tissue. Unfortunately, in the majority of instances, the patient not being strong, degeneration follows, and suppuration is established. Thus, a joint, remaining more or less swollen and stiff, becomes hot, tender on pressure, and painful after exercise. At the same time the ligaments are invaded and disappear, the articular cartilages degenerate, the bone becomes carious, and sinuses are established in one or more directions, as in the preparation before you, and often in accordance with gravitation, in order that the pus and other débris may be discharged. While these destructive changes are taking place the hamstring muscles displace the leg backwards and rotate it outwards, both shortening and distorting the limb, and possibly to be followed by either amputation or excision. Happily, in many instances, the degree of disorganisation which I have mentioned does not transpire, but a fibrous anchylosis, more or less complete, occurs. Two such cases have been recently under care, and left the hospital last week convalescent.

Charlotte B——, aged six years and a half, admitted Sept. 28th, 1875. The mother stated that the child struck the left knee three years ago, when it became swollen and stiff and ultimately painful, and remained so for a long time. She had a doctor for it, who called the disease "white swelling." The child is fairly nourished, somewhat anæmic, has dark hair and eyes, and is very intelligent. On examination, the left lower extremity is much wasted, the leg, which is somewhat displaced backwards and rotated outwards, forms with the thigh, when fully extended, an angle of 115°. The patella is immovable and fixed to the lower part of the outer condyle of the femur.

The case of Alice F——, eleven years of age, is almost similar in every particular. She fell and struck her knee five years ago; it gradually became swollen and stiff, but there was very trifling pain. She had never kept her bed.

You will recollect that these are the two instances in which, to remedy a deformity consequent on anchylosis of the patella to the femur, I performed a subcutaneous operation. With a tenotomy-knife alone in one instance, aided by a saw in the other, I separated the patella from the femur—an all-important step,—to promote extension of the leg. No discomfort whatever, no suppuration, followed the operations, and both children left the hospital last week greatly benefited.

This preparation which I show you, where the patella is fixed to the femur by fibrous anchylosis, while the tibia is somewhat displaced backwards, is in a condition similar to that in which the joint of each of those children was previous to operation. You will readily perceive that a patella so fixed is a direct mechanical obstacle to extension of the tibia upon the femur, and that it must be dislodged before that can be effected. The operation which I have suggested, and which you have seen me perform twice, had this object in view. In one case 45° of extension was gained by the operation, and the child gets about comfortably with a high-heeled boot.

In these two cases the granulation-cells, instead of degenerating into pus, were converted into fibrous tissue, as in a cutaneous cicatrix, leading to a firm union of the patella to the femur, but to a weak union of the latter to the tibia.

Prognosis.—This, you will at once see, is unfavourable, as the disease is rarely arrested, leaving the joint sound. This gelatinous disease of the synovial membrane may be conveniently divided into two stages. The *first* is characterised by *cell-growth*, while the *second* is illustrated on the one hand by the *adhesive*, on the other hand by the *suppurative* form of inflammation. Of these latter the adhesive is the least to be feared, while the suppurative is of grave significance, because the necessity either for excision or amputation may arise during its progress.

Diagnosis.—The chief symptoms are (following or not some slight accident)—stiffness in the morning, causing limping, mechanical in its nature, due to the swelling; gradually passing off on using the limb; associated at first with painless swelling; to be attended by tenderness and pain, not necessarily obliging the patient to lie up, unless suppuration, "starting pains," &c., arise.

All these cases illustrate the insidious and comparatively painless nature of the malady even to anchylosis, neither of the girls having kept her bed.

Treatment.—Good diet, change of air, and tonics, including preparations of iodine, are indicated by reason of the chronic nature of the complaint, implying a serious constitutional error. Perfect rest to the joint must be ensured by splints, with an occasional counter-irritant in the shape of a flying blister; and when heat and tenderness have

nearly subsided, strapping and bandage, to support the cell-mass and prevent venous congestion, must be applied. When all danger of resuscitating inflammation appears to have ceased, frictions and passive motion will much avail. Thomas's splint, such as I show you, as used by one of the above children,—with a patten attached to the boot of the sound foot, will allow the patient to take exercise in the open air, will promote extension, and yet secure a certain amount of repose to the joint.

Tenotomy.—You will have remarked that, of my three cases, in that of the lad the disease is in its first stage, while in the two girls the malady has terminated in anchylosis with deformity. Now, as prevention is better than cure, I would suggest, as a rule of practice, that an attempt be made to prevent that deformity that you have witnessed in these children by a subcutaneous section of one or more hamstring tendons—at any rate the biceps, the power of which to rotate the leg outwards you can readily appreciate on your own person. I adopted this plan in the case of a child of a professional friend, and I believe with marked benefit. I propose to do the same in the instance of the lad above mentioned.

ABSTRACT
OF THE
Croonian Lectures
ON THE
PATHOLOGY AND RELATIONS OF ALBUMINURIA.

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LECTURE II.

THE lecture commenced with a consideration of the secondary lesions which ensue upon the cardio-vascular change proper to the granular kidney. The retinal change, involving hyperæmia, serous infiltration, hæmorrhage, and white spots, was described as due to arterial leakage or rupture connected with vascular deterioration and increased pressure. The optic state, generally spoken of comprehensively as albuminuric retinitis, was not peculiar to the granular kidney, though most commonly associated with it. It was found sometimes both with diffuse nephritis and lardaceous infiltration.

The retinal was to be regarded as but the outward and visible sign of a universal vascular change. It almost always showed advanced renal disease; though with the granular kidney it might occur while as yet the disorder had been undeclared by any other prominent disturbance, and thus constitute its first obvious symptom. The form of renal disease most apt to become thus complicated was that which sometimes ensued upon pregnancy—a fact to be, perhaps, explained by the increase of vascular tension which normally belongs to this state. The exceptions to the general rule which associates the granular kidney with albuminuric retinitis, though not numerous, were sufficient to show that there was no necessary pathological connexion or identity of kind between the renal and the retinal change, but only that the retinal change was the expression of a condition which, though most common with the granular kidney, was not peculiar to it.

The association of the same form of renal disease with other hæmorrhagic lesions, more particularly with cerebral apoplexy, was considered. It was shown that two-thirds of the instances of fatal extravasation within the skull were of renal origin; and the occasional occurrence of cerebral hæmorrhage even in childhood, when the kidneys were granular, was exemplified by a striking instance in a girl of twelve.

Passing to the inflammatory results of the disease, pericarditis was insisted on as especially connected with it. As a pathological rarity, a peculiar form of ulceration of the small bowel had been found in connexion with, and apparently due to, the renal change. The ulcers were described as affecting the lower end of the small bowel, and as setting up local peritonitis.

Two instances of renal granulation as affecting children were given in detail, and others briefly referred to, showing that at the earliest periods of life at which the disease was found the cardio-vascular changes were present, the heart and arteries being constantly thickened, while cerebral and retinal hæmorrhages were of occasional occurrence.

Touching upon the association of the renal change, as part of a common fibrosis, with a similar change in other organs, it was shown that, taking the liver as the test, renal and hepatic fibrosis so seldom occurred together that they must be generally looked upon as due to separate causes, not to any general fibrotic tendency. And with regard to general fibroid thickening as the result of age, it was inferred, from the examination of three nonagenarians, to be less frequent than fatty, calcareous, and atrophic changes. The conclusion was generally stated that, putting aside for the present the associated affections of the arteries, the kidneys became the subjects of fibrotic change for the most part alone, as the result of a morbid instigation proper to themselves, not distributed over many organs.

Proceeding to inquire into the causes of the organic change, it was shown that in most cases they could not be isolated, but belonged to the common ways and even tenour of life. Hereditary influence could be sometimes discovered, as was illustrated by reference to an ancient family in which three generations, comprising seventeen individuals, had furnished eleven subjects of the disease. Climate, which to be most injurious must be temperate but variable, was a fruitful source of the complaint. Coming to causes which fall more partially, those involving mechanical congestion of the kidney, obstructive disease of the heart, and pregnancy, were discussed. The disease could be traced also to circumstances, like gout, of which the mode of action was less obvious; to the influence of renal irritants, such as lead and alcohol; it could be recognised as a late result of scarlatina, or of diffused nephritis, however induced; it occasionally appeared to ensue upon the congestion of tropical intermittents; and, finally, it was attributed to the prolonged influence of accumulated urine.

Thus, showing that the renal fibrosis, though often of obscure origin, was sometimes to be traced to causes acting locally on the gland by way of mechanical congestion or specific irritation, it was next made apparent, that whether the renal disease was of determinate or doubtful source, the cardio-vascular change was equally present.

With these facts a vexed question was approached—the significance of the cardio-vascular changes, whether directly consequent upon the glandular embarrassment or only associated with it as a parallel effect of a common cause.

The albuminuric change of vessel was shown to be present not only with the fibrotic kidney of advanced life, but as constantly with that of childhood—where, to say the least, changes allied to those of age were improbable,—with the condition as traceable to mechanical congestion or modes of glandular irritation, and not less so when it ensued as the sequel of scarlatinal nephritis or nephritis arising from cold or other mischance. The evidence already adduced that a similar arterial change may be produced by comparatively recent nephritis was reverted to, and allusion made to the observation of the same vascular state as the result of disablement of the kidney by stone or other accident.

The conclusion was held to be inevitable that the arterial and cardiac changes were not, in general, parts of a deterioration originating systemically, but were definite consequences of the glandular injury.

The nature of the arterial and cardiac changes involving muscular hypertrophy and fibroid induration, together with their occurrence in inflammatory and fibrotic disease where arterial tension is increased, and their absence with the lardaceous, with which, as a rule, whether in consequence of wasting discharges or of the little impairment which until late falls upon the secreting power of the kidney, arterial tension is little or not at all exalted, led to the belief that the structural alteration was the result of the tension by which it is accompanied and preceded.

To seek the cause of the tension or fulness of the arterial

system it must be placed in obstruction of its outflow, and the only question which remained for discussion was whether the hindrance should be placed, with Bright, in the capillaries, or, with Johnson, in the arterioles.

Largely as Johnson's observation of muscular hypertrophy had been borne out by what had already been advanced, his explanation, according to which the heart and arteries became hypertrophied by antagonistic action, was held to be less tenable than the older hypothesis. Accepting as the starting-point of the vascular changes a condition of blood which rendered it difficult of capillary transmission, the complicated series of changes admitted of easy explanation. The heart and the arteries were together hypertrophied in their efforts to close upon the blood accumulating in them from the obstacle in front of both. With this the increased pressure on the vessel-walls caused increased soakage into them, and ultimately fibroid induration of their coats, after the manner of congestion wherever it may occur. The associated degenerative changes were probably due to the irritative effect of the impure blood. Thus, as of old, the whole pathological series was traced to glandular inefficiency and uræmic contamination.

Whether the cardio-vascular change have other modes of origin—whether, as is probable, the state of blood necessary to cause it may be produced by circumstances apart from renal disease, are questions as yet unanswered. No doubt in many cases hypertrophy of the heart gives evidence of arterial change while as yet there is little direct evidence of renal disease. In such cases the renal disease was probably more often hidden than absent. The kidneys might be so far destroyed that fatal uræmia was imminent, but the urine contain no albumen, or a scarcely appreciable trace. The vascular mischief, therefore, might occur in connexion with latent renal disease; how far independently of renal disease was yet *sub judice*.

ON GELSEMINUM SEMPERVIRENS.

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(*Continued from p.* 491.)

THE INFLUENCE OF GELSEMINUM ON RESPIRATION.

DR. BURDON-SANDERSON'S lucid explanation of the effects of gelseminum on respiration has left us but little more to say on this subject. There are, however, one or two points of interest, into the detailed discussion of which he has purposely refrained from entering, and concerning which we may take this opportunity of speaking more fully. The first of these is the subject of the primary action of gelseminum on respiration. We have already shown that the ultimate and most obvious effect of gelseminum is the diminution in the rapidity of the respiratory movements, and the decrease in the excursus or range of motion of the muscles producing this movement. Dr. Burdon-Sanderson has shown, moreover, that this condition of diminished activity is preceded by an opposite condition, in which there is overaction and increased range of movement. It might naturally be supposed that a drug which would augment the range of respiratory movement before depressing it, would in a similar manner increase its frequency before diminishing it. Is such the case? Is this supposition confirmed by our observations? We think not, for a careful examination of the tracings obtained in our different experiments fails to give in any single instance the slightest indication of primary respiratory quickening. Fearing, however, lest the initial quickening should have been present, and yet should have been of so transitory a nature as not to have been detected, we determined to make some observations which should be especially devoted to the elucidation of this subject.

The question at first sight appears to be sufficiently simple of solution, but is in reality one which requires an unusual amount of care in its investigation. In our earlier experiments we first ascertained by simple observation the rapidity of the chest movements in a rabbit, and then injected the animal subcutaneously with the gelseminum, continuing the observation until the ordinary symptoms of poisoning were developed. We obtained, as we thought, abundant evidence of primary quickening of respiration, but a little closer investigation soon showed that this was due to the excitement and irritation caused by the introduction of the cannula of the syringe, and that it was not in any way owing to the action of the drug.

We then attempted to eliminate this source of error by the administration of chloroform. This method also proved unsatisfactory, for it is extremely difficult in the case of the lower animals to administer the anæsthetic uniformly, and a slight increase or diminution in the quantity or state of concentration of the chloroform greatly influences the condition of the animal and its mode of breathing.

Our difficulties were finally overcome by the substitution of chloral for chloroform. The animal (a rabbit) was first injected in the loose areolar tissue in the region of the axilla with twelve minims of a one-in-fifty solution of chloral deluted with saline. It was then returned to its hutch and allowed to remain perfectly quiet in the dark for about half an hour, this method having been found by experience to be conducive to the development of the anæsthetic action of the drug. The animal was then, whilst in a state of perfect insensibility, secured on its back on a rabbit-support, and the cannula of the hypodermic syringe was pushed under the skin, so that the gelseminum might at any moment be injected without causing the least disturbance. The respiration was counted at intervals of about two minutes for more than an hour, and was found to be remarkably constant and subject to extremely little variation. An injection of six minims of the liquid extract of gelseminum was then cautiously administered through the previously introduced cannula. The chest movements were counted immediately and at successive intervals of a minute, when it was found that the rate was identical with that which had been recorded for a considerable time before the injection. This experiment was repeated three or four times under slightly varying conditions, and the result in each case fully justified the conclusion that gelseminum produced no primary quickening of respiration.

We have already intimated that there are reasons for believing that the respiratory effects of gelseminum are due to the action of the drug neither on the muscles nor on the motor nerves, but of these facts we have as yet given no experimental proof. The investigation of this point is as simple as any which can present itself in the whole range of practical physiology or therapeutics. We killed a rabbit by the subcutaneous injection of ten drops of the liquid extract of gelseminum, and immediately after the death of the animal opened the thorax and abdomen. The diaphragm was subjected to galvanic stimulation, direct contact of the electrodes producing vigorous contraction. The phrenic nerve was then excited electrically, and was found to conduct well, the diaphragm acting as before. The application of the electrodes to the intercostal muscles showed no want of contractility in that region, while a stimulation of the intercostal nerves demonstrated that their powers of conduction had undergone no impairment.

In the course of our investigations we performed an experiment which has occupied the attention of previous workers in the same field. We did not for one moment suppose that the powerful influence of gelseminum on respiration was caused by the action of the drug on the afferent fibres of the vagus, but we nevertheless considered it advisable, as a matter of precaution, to administer the liquid extract to an animal in which the pneumogastrics had been previously cut. The subject of this experiment was a large Cyprus cat, and the nerves were divided under chloroform in the neighbourhood of the larynx. A subcutaneous injection of gelseminum caused as marked a diminution in the rapidity of respiration, and proved fatal as quickly, as in cases in which no operative procedure had been resorted to.

In this article, then, we have given the detailed proof of the following facts:—(1) Gelseminum produces no primary quickening of respiration. (2) It has no direct action on either the diaphragm or intercostal muscles. (3) It paralyses neither the phrenic nor the intercostal nerves. (4) It diminishes the rate of respiration after both vagi have been cut.

(*To be continued.*)

ON THE RESULTS OF THE CAUTERY IN THE TREATMENT OF THE PEDICLE IN OVARIOTOMY.

BY THOMAS KEITH, F.R.C.S. EDIN.

I HAVE now used the cautery fifty times (in 216 operations) in the division of the pedicle. The results are given in the accompanying table. These results show 92 per cent. of recoveries, and are the best that I have yet had. This is not a large mortality. That it ought to be lower I am certain; and, while admitting that it may in this instance be partly accidental, the numbers are sufficient to prove that the method of dividing the pedicle by the actual cautery, as introduced by the late Mr. Baker Brown, is a good method, and one which has had scant justice done to it since his death.

I hope soon to give all the cases in detail, so that each one interested in the matter may judge for himself as to the value of this way of dealing with the pedicle. The success of ovariotomy depends upon many circumstances, and I do not say that the low mortality is to be altogether ascribed to the use of the cautery, for I know too well that, after a series of better results than usual, we are apt to think that we are on the right track at last, and that all will now go well, whereas we soon find that we are only rolling, like Sisyphus, the stone which will tumble down whether we will or not.

Edinburgh.

No.	MEDICAL ATTENDANT.	DATE.	AGE	ADHESIONS, &c.	RESULT.
		1870.			
1	Dr. George Balfour	April	35	Acute suppurating cyst. Extensive parietal adhesions. 30 lb	Recovered
2	Dr. Ronald, Ayr	May	61	No adhesions. Semi-solid tumour. 39 lb.	,,
3	Dr. Fergusson, Leslie	June	27	Parietal, omental, and intestinal adhesions. 12 lb. Ascites.	,,
4	Dr. Stewart, Newport	June	47	Parietal, omental, and intestinal adhesions. 10 lb. Ascites.	,,
5	Dr. Stephenson	Oct.	23	Very extensive and firm parietal and pelvic adhesions. 18 lb.	,,
6	Dr. Haig, Airth	Dec.	23	Adhesions universal and very firm. 80 lb.	,,
		1872.			
7	Dr. Kirkwood, Largs	May	48	No adhesions. 7 lb.; 4 gallons ascitic fluid.	,,
8	Dr. George, Keith	June	31	Fold of intestine. 2½lb. Ascites.	,,
9	Dr. Walker, Dollar	June	57	Adhesions universal, in pelvis, to bladder and rectum. Tapped twenty times. 50 lb.	,,
10	Dr. Keiller	July	17	Extensive parietal adhesions. 51 lb.	,,
11	Dr. Lothian, Glasgow	July	20	No adhesions. 20 lb.	,,
12	Dr. Thomson, Invereek	July	40	Suppurating cyst. Adhesions very extensive. 30 lb.	,,
13	Mrs. Morgan, Liverpool	Aug.	35	Extensive parietal adhesions. 60 lb. Tapped fourteen times.	,,
14	Mr. Welford, Sunderland	Sept.	57	Acute suppurating cyst. Adhesions universal. 25 lb.	,,
15	Dr. Logie, Kirkwall	Oct.	31	Parietal and omental adhesions. 26 lb.	,,
16	Dr. Hardie	Oct.	40	Omental adhesions. 67 lb.	,,
17	Dr. Stewart, Hexham	Nov.	21	Very extensive parietal and omental adhesions. 27 lb.	,,
18	Dr. Gordon	Dec.	67	Intestinal and mesenteric. Solid tumour of ovary. 6 lb. Ascites	,,
19	Dr. Campbell, Montreal	Dec.	20	Acute suppurating cyst. 25 lb. Adhesions very general.	,,
		1873.			
20	Dr. Black	Jan.	53	Acute suppurating cyst. 29 lb. Parietal, intestinal, and hepatic	Died
21	Dr. Simpson, Marykirk	Feb.	29	Very firm parietal and pelvic. 19 lb. Much dissection.	Recovered
22	Dr. James Sidey	Mch.	63	General parietal adhesions.	,,
23	Dr. Wallace, Parsonstown	April	20	Omental and general parietal. 41 lb. Both ovaries removed.	,,
24	Miss B., Edinburgh	April	24	No adhesions. 14 lb.	,,
25	Dr. M. Duncan	May	45	Extensive and firm parietal and omental adhesions. 16 lb.	,,
26	Dr. Howden, Haddington	Aug.	57	Intestinal, mesenteric, and pelvic adhesions. 30 lb.	,,
27	Dr. Kydd, Alyth	Sept.	36	Acute suppurating cyst. 55 lb. Adhesions very firm and extensive.	,,
28	Dr. Muir, Moniaive	Sept.	24	Omental, parietal, and pelvic adhesions. 35 lb.	,,
29	Dr. G. Keith	Oct.	27	Burst suppurating cyst. 30 lb. Adhesions universal.	,,
30	Dr. Lyall, Leven.	Nov.	27	Very firm and extensive parietal and omental adhesions. 27 lb	,,
31	Dr. McCulloch, Dumfries	Dec.	24	Extensive omental and pelvic. Solid tumour of ovary. Ascites	,,
		1874.			
32	Dr. Hoggan, Thornhill	Jan.	23	Adhesions universal; very firm in pelvis. 43 lb.	Died
33	Dr. Bernard, Londonderry	Feb.	26	No adhesions. 20 lb.	Recovered
34	Dr. Dickson, Falkland	April	65	General parietal adhesions. 43 lb.	,,
35	Dr. Wilson	April	36	Extensive parietal, omental, and pelvic. 25 lb. Ascites.	,,
36	Dr. M. Duncan	May	36	Semi-solid. No adhesions.	,,
37	Dr. Menzies	May	51	Extensive omental and intestinal. Ascites.	,,
38	Dr. McGillivray, Oban	July	46	General and firm parietal and pelvic adhesions. 38 lb.	,,
39	Dr. Bernard, Londonderry	July	29	Parietal and omental adhesions. 75 lb.	,,
40	Dr. Filson, Portaferry	Oct.	44	Solid malignant tumour. Ascites. Cancer of peritoneum.	Died
41	Dr. Barkus, Gateshead	Oct.	31	No adhesions.	Recovered
42	Dr. Ziegler	Nov.	60	No adhesions. 16 lb.	,,
		1875.			
43	Dr. Dickson	Jan.	34	General parietal adhesions. 27 lb.	,,
44	Dr. McFadyn, Alva	Mch.	30	No adhesions.	,,
45	Dr. Barkus, Gateshead	May	34	Parietal adhesions. 34 lb.	,,
46	Dr. Perry, Glasgow	May	39	No adhesions.	,,
47	Dr. Greig, Dundee	July	23	General parietal and omental. 40 lb.	,,
48	Dr. G. Keith	Sept.	49	Slight parietal. 53 lb. Small pediculated uterine fibroid also removed.	Died
		1876.			
49	Dr. S. Moore, Glasgow	Jan.	37	Very firm parietal and omental adhesions. 68 lb.	Recovered
50	Dr. Wedderburn, Forfar	Jan.	13	Slight omental adhesion. 17 lb. Dermoid cyst.	,,

MR. HUTCHINSON'S "CHEIRO-POMPHOLYX."

BY TILBURY FOX, M.D., F.R.C.P.,
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MR. HUTCHINSON, in the fasciculus of his "Illustrations of Clinical Surgery," just issued (April), has depicted and described a disease to which he has given the name "Cheiro-pompholyx." I have read his account of this form of eruption with no little astonishment; because, in the first place, the disease is nothing more nor less than that which I described three or four years ago, in the third edition of my work on Skin Diseases, as "Dysidrosis"; and, in the second place, on more than one occasion it has been pointed out to Mr. Hutchinson that his projected Cheiro-pompholyx was my Dysidrosis (which has been long recognised at University College), and I possess a letter of his (dated Dec. 1873) in which he states his intention to "read your papers"; and, in the third place, his illustration is taken from a case which I saw at the suggestion of Dr. Russell Reynolds, and which, in conversation with Mr. Hutchinson, I declared to be a severe form of my Dysidrosis.

But, to make the identity of the two things clear, I will put side by side Mr. Hutchinson's description of April, 1876, and my description of Jan. 1873 (Skin Diseases), concerning the main characters of the disease. The italics are mine.

MR. HUTCHINSON'S DESCRIPTION.	DR. TILBURY FOX'S DESCRIPTION.
"The patient whose hands are here shown is a lady of about fifty years of age, single, who has been subject from the age of twenty onwards to a great variety of ailments, which have chiefly had reference to her nervous system.	"I never knew any patient who had this disease, I am now describing, well. In all the severer cases patients have been the subject of great nervous debility, and in some cases have been under the care of physicians for various anomalous nervous diseases—odd muscular affections. Some have been prostrated by mental anxiety or worry. It may with probability be supposed that the innervation of the gland (sweat) is specially at fault."
"In several of the most severe cases which I have witnessed the eruption was attended by extreme depression of spirits, and in one this condition had been such as to lead the parents to fear insanity.	
"There can be no doubt, I think, that this eruption is a neurosis, its tendency to spontaneous cure, and its frequent coincidence with other nervous symptoms, being of considerable weight in that direction."	
"Miss G—— stated that she usually experienced, as premonitory symptoms, a general sense of increased discomfort, as burning of the hands and feet; next, with great burning and itching and a sense of stiffness, a *number of deeply placed little blebs would show themselves* by the sides of the fingers; in a few days these would coalesce, and enormous bullæ, such as those shown in the portrait, would result.	"There is always much itching and a good deal of burning present with the eruption. . . The hand is very stiff and painful. In its slightest form it is confined to the hand, occurring in the interdigits, over the palm, and along the sides of the fingers and on the palmar surface, some or all of these parts.
"It (Cheiro-Pompholyx) is rather a very severe example of what in minor degrees is tolerably common. Many, indeed, perhaps, most of us, are liable at times, in connexion with slight derangements of health, or possibly with exposure to the sun, to the occurrence of a very irritable *sago-grain eruption* on the sides of the fingers. The so-called *sago-grains* are *deeply placed effusions of serum*, but in a large majority of cases they undergo spontaneous absorption after a few days, and not even peeling of the epidermis results. . . . . More severe cases, in which the vesicles coalesce and develop into bullæ, are not very uncommon."	"The eruption is made up in the first instance of *minute vesicles deeply imbedded in the skin*. The vesicles are at first isolated. They do not readily burst, and when they have existed for a few days the appearance of the affected part is just as though a number of *small boiled sago-grains were imbedded in the skin*. These *sago-grain*-looking points are caused, &c. . The beaded or *sago-grain like imbedded vesicles* are often well seen, . . they eventually run together into the form of aggregated masses of small bullæ. Actual bullæ of greater or less size may form. . . I have seen the back of the hand and the palm with bullæ upon them an inch in height."
"With the bullous eruption on the hands there usually occurred a red lichenous rash over the whole body, which varied much in colour at different parts of the day, and which, although it never caused vesicles, was always followed by desquamation. . . . While in a few of the most severe of all it is attended by a general red lichen rash."	"The eruption may be complicated by a rash more or less general over the body. It is similar to the eruption of lichen tropicus or miliaria."
"Yet its duration is by no means always so short as in the case just narrated, and in some instances it may last for a couple of months, and require treatment."	"The disease lasts ten days or so in some cases, but in others for two or three weeks."
"In several cases the vesications always broke, and a state much resembling that known as psoriasis palmaris resulted in the palms, while on the sides of the fingers it looks more like eczema."	"In some cases a red, dry, slightly scurfy painful surface is left behind, and becomes chronic. . . . The cuticle then peels off, leaving a non-discharging reddened exposed derma."
"The feet were always affected by it in a slight degree . . . . and only in the more severe cases affects the feet."	"The same state of things as exists in the hands may be present in the feet, large bullæ forming."
"They (the sago grains) never by any chance result in eczema."	"Eczema may, however, and does rarely, follow the disease I admit, but not frequently."

Can anyone doubt, after comparing the above quotations, and especially those containing the very peculiar expression, *sago-grain-like*, applied to the early stage of the eruption by myself in the first instance, that *cheiro pompholyx* is *dysidrosis*? I cannot conceive why Mr. Hutchinson has ignored my account of the disease, as his attention has been specially directed to the identity of these two conditions. There are, however, two features of the disease which Mr. Hutchinson fails to recognise—viz., the origin of the eruption in the sweat apparatus, the vesicles being formed, not, as he asserts, by effusion of serum, but by collections of sweat; and the nature of the general rash, which is miliary in character and not lichenous—two points upon which I have laid particular stress in my account of the disease. His designation is a most unhappy one. Mr. Hutchinson distinctly states that in his use of the term pompholyx he does not mean to imply that it has any relation to true pemphigus, the use of which term by him is therefore very misleading. It will be observed that he states that the disease attacks, not the hands only, but the feet also—a fact I previously put forward, and which renders his prefix *cheiro* an unfaithful one.

The disease was first distinctly described by myself in 1873 as an eruption occurring in subjects of nervous debility and trouble, especially about the hands and feet, though sometimes accompanied by a miliary rash; as consequent upon a paresis of the nerve-supply of the sweat apparatus, whereby its functions become deranged, with the consequent production of sago-grain-like vesicles, that soon aggregate together into bullæ of small or large size, the disease having no relation to eczema, though it sometimes leaves behind it a reddened, scaly, slightly infiltrated derma. I do not deem it right to myself or to the school to withhold

these comments, in the face of Mr. Hutchinson's assertion that he "is not sure that any correct clinical description (of the disease) has been given."

Harley-street.

CASES OF AURAL POLYPI.

By G. P. FIELD, M.R.C.S.,

AURAL SURGEON TO ST. MARY'S HOSPITAL.

CASE 1.—A girl, A. M——, aged twenty-six, was brought to me at the hospital with most extensive disease of the mastoid cells. She had had a polypus removed somewhere in the country, about a year previously; no after-treatment had been adopted, and the discharge was allowed to continue until the inflammation thus set up extended to the brain, and she nearly lost her life in consequence. A free incision over the mastoid process down to the bone considerably relieved her, and by careful treatment for six months, by astringent lotions &c., keeping the parts constantly clean, she entirely lost the discharge, and regained a very fair amount of hearing power. This case shows what mischief may result from neglecting proper treatment after the polypus has been removed.

CASE 2.—A lady was sent to consult me by Mr. Milson, in June, 1874. The right membrana tympani was perforated, and a small red polypus could easily be distinguished making its way through that structure. She had suffered from an offensive discharge from that ear for eight weeks, with slight pain and tinnitus aurium. The ear was syringed frequently with warm water, and afterwards a warm solution of carbolic acid and sulphate of zinc; five grains of each to one ounce was ordered to be poured into the ear, and allowed to remain for some time. The polypus was painted every morning with a solution of nitrate of silver, twenty grains to the ounce. After a very short time the discharge and the polypus disappeared, the membrane healed up, and the patient regained her hearing.

This case shows very well how smaller growths may be made to disappear by the constant application of caustics. Strong solution of sulphate of zinc answers very well in some of the softer kinds of polypus; or a combination of the two, as used in this case, is perhaps the best treatment.

CASE 3.—E. W——, aged forty-two, came to see me at the hospital with a large polypus completely blocking up the left external meatus. Says that she "has been deaf for three or four months, and has had slight noises in the head, but no pain. There is a great deal of very offensive discharge which comes away at times." The growth, which proved to be a very large one, I removed. Very slight hæmorrhage followed, and she was completely cured by using the sulphate of zinc and carbolic acid lotion, as in the last case.

CASE 4.—A. L——, aged sixteen, came to the hospital December 6th, with a large polypus in the right ear. It was easily removed, but left a large perforation in the membrana tympani. She attended regularly for two months. The discharge continued for some time. All kinds of lotion were used; the acetate of lead, two grains to the ounce, proved of most service. At length the discharge ceased, the perforation became much smaller, and she left the hospital hearing perfectly well.

CASE 5.—This was a young man sent to see me by Mr. Ransford. Much the same kind of polypus as in last case; a very large one. The hæmorrhage after the operation was severe, but was checked after a little time by syringing cold water gently into the ear. The perforation in the membrane healed up remarkably soon. In ten days' time he was quite well. The carbolic acid and sulphate of zinc lotion was used diligently in this case.

CASE 6.—J. M——, aged thirty-two, a school teacher, came to the hospital with a large polypus in each ear. They were both successfully removed with Wilde's snare. A great quantity of discharge came away afterwards, which readily yielded to the frequent application of astringent lotions. She was going on very satisfactorily when she left the hospital.

I could give a great many instances of the same kind; but what I want especially to point out is, that a successful termination to these cases is not to be expected unless a careful treatment is adopted after the removal of the polypus. If the discharge is allowed to go on unchecked after the operation, the disease will in all probability shortly return. Polypi are frequently removed, and no steps are taken to get rid of the accumulated secretion in the tympanic cavity, and, therefore, in a short time another polypus is likely to spring up again. Thorough cleanliness is most essential. Hinton remarks: "Growths of this nature in the ear are extremely prone to recur, but the degree of obstinacy with which they resist treatment is very variable. In some rare cases they will come away spontaneously and leave a permanently healthy surface; in others they will disappear before treatment, and show no tendency to recur; in others their eradication is attended with the utmost difficulty. It has seemed to me that the accumulation of secretion behind the polypus or its root is one of the most frequent sources of difficulty in their treatment, especially in cases where the membrana tympani is perforated. The viscid matter poured out by the spongy mucous membrane of the tympanum tends to cling about its various crevices and maintain a perpetual irritation which sets every kind of caustic or healing application at defiance. Accordingly, a chief object to be aimed at in the management of polypi is the perfect cleansing of the deep-seated parts of the organ. This is not to be effected by syringing merely, however vigorous and long-continued. Water does not remove the tenacious matter, nor, probably, does the stream reach the whole secreting surface."

I have found, almost invariably, that aural polypi arise from the mucous membrane of the tympanum, and not from the walls of the external meatus; but they occasionally take their origin from the membrana tympani, and sometimes from the Eustachian tube. They are, as a rule, the result of long-standing otorrhœa, and the polypus makes its way out through a perforation in the membrana tympani. They vary considerably in structure, size, &c. According to Stendener, the polypi which occur most frequently in the ear are mucous, the firm fibromata are less common, and the gelatinous myxomata the rarest. All kinds of methods have been proposed for their removal. My predecessors at St. Mary's, Toynbee and Allen, each invented an instrument—the former the lever ring forceps, and the latter a slender three-bladed pair of forceps. Dr. Purves has also introduced an excellent instrument for cutting through the growth. I always use Wilde's snare, and prefer it to everything else that has been suggested.

The illustration shows the microscopical appearance of the most common kind of aural polypus. I am indebted to my colleague, Dr. Shepherd, for the following notes:—"On section the growth showed the usual fibro-cellular structure of these polypi—round, oval, and stellate cells imbedded in a delicate reticulum of fibres. In some places the latter were almost absent; in others, and apparently in the neigh-

bourhood of a collection of bloodvessels, the stroma was more distinctly fibrillated. The bloodvessels themselves, as shown in transverse and longitudinal section, were pretty numerous."

Lower Seymour-street, W.

NOTES ON A

CASE OF TETANUS TREATED BY CHLORAL.

BY LEONARD CANE, M.D., B.S. LOND.,

CONSULTING SURGEON TO PETERBOROUGH GENERAL INFIRMARY.

THE following case presents some features of interest, and may be worth recording.

F. B——, aged twenty-eight, a tin-worker in an iron factory, who stated that he had been suffering from debility for some months, gave the following history:—About three weeks ago he injured the great toe of his right foot by letting fall a heavy weight upon it. This gave him severe pain at the time, and the toe bled a little; but after a few days the pain passed off, and up till the present time he has had no symptoms connected with the injury. He does not remember to have pricked or hurt the foot since that time. He was a steady man; had not been drinking. Had never had fits or syphilis, but suffered from rheumatism some years ago. On March 15th, whilst walking home to dinner, he felt a sharp pain in his great toe, which was followed by severe "cramp" in his foot and ankle. This came on so quickly that he got home with difficulty. He at once rested up his leg and fomented it with hot flannels, &c.; but the pain increased and came on "in fits." As it continued to increase he sent for me on the evening of the same day.

I found him lying on a sofa with a peculiarly anxious expression and an excited manner. He talked rapidly at times, holding his breath for a few seconds. He complained of pain coming on at intervals of a minute or more, and with this there were sharp convulsive twitchings of the right leg. His respiration was affected at the same time, and became slower, or altogether stopped, during the paroxysm. On inquiry, he said he felt cramp and stiffness about his neck and shoulders and a "peculiar feeling" about his face, but there were no marked symptoms of "lock-jaw."

On uncovering the foot a convulsive attack at once came on, and the application of the cold hand started it again when it had subsided. On examining the great toe I found considerable discolouration of the upper surface, the nail being nearly black, and on the under surface was a small punctured wound, such as might have arisen from a nail. The patient was not aware that he had pricked the ball of his great toe at any time. The patient had not eaten or swallowed anything, but this was not from inability to swallow, but from anxiety and pain. He drank readily and without difficulty.

I at once prescribed twenty grains of chloral, to be taken every two or three hours; the leg to be kept at rest, and fomented from time to time as this appeared to give ease. After taking two doses of the chloral the patient became quieter, and towards the latter part of the night fell asleep. There were some slight "twitchings" when he was asleep.

On the following morning he expressed himself as much better, but still complained of the pain and cramp. His breathing was now only slightly affected when the pain came on, there being only a slight pause in the respiration. He was ordered to continue the chloral every four hours during the day. On the evening of the same day, when seen again, he was decidedly better; the spasmodic movements occurred only at long intervals, and were very slight. Had felt very drowsy during the day, and slept at intervals. Ordered twenty grains of chloral at bedtime. After this he slept well during the greater part of the night.

The next day the movements had nearly disappeared, and the patient complained only of great exhaustion. Ordered a mixture containing ten grains of bromide of potassium and one drachm of compound tincture of gentian for a dose, three times a day.

Since then he has had no recurrence of the symptoms, and has resumed his employment in his usual health.

Peterborough.

HYDROPHOBIA AND RABIES CANINA.

BY HENRY MUSCROFT, M.D.

IN the very interesting article on rabies canina which appeared in THE LANCET of March 4th, confirmatory evidence is given of the facts which it was my duty to bring to the notice of the readers of THE LANCET on the 10th of October, 1874, and again on the 19th of December in the same year, as to the occasional propagation of the disease by the bites of non-rabid animals.

If anything could add force to what was then stated, it is the circumstance that so high an authority on the subject of rabies as Mr. Fleming, who strongly opposed the arguments contained in my first letter, should now deem it his duty, as a result of recent practical experience, to bear testimony in favour of the deductions contained in that letter.

Members of the profession who may not have seen the article in THE LANCET of March 4th may be reminded that the text of that article was the Etiology of Rabies Canina, the subject of which had been suggested by an account given by Mr. Fleming in the *Veterinary Journal*, and in which he related the circumstance of rabies occurring after the bite of a healthy dog, and the bitten dog having bitten another, rabies also occurred in the latter. The original offender, the *fons et origo mali*, still remained in good health at the time Mr. Fleming's article was written.

It is not surprising that such a chain of evidence should have altered Mr. Fleming's opinion as to the etiology of rabies canina, and his perfect candour in preventing a continuance of misconception by at once giving reason for his change of opinion is a matter for which he deserves the thanks of the profession, although this timely declaration is only what might have been expected from such an earnest searcher after truth as Mr. Fleming.

In the article referred to, in the *Veterinary Journal*, Mr. Fleming says,—"Alarming and serious though the statement may be, yet in the cause of truth and humanity, and in the furtherance of pathological knowledge, we feel that it is our duty to record facts which are undeniable, and which, it may be assumed, are not overstated, when we declare that they are totally opposed to conclusions which we had previously all but accepted as justifiable because we thought absolutely correct."

With such evidence as that of Mr. Fleming as to the production of rabies canina by the bite of a healthy dog, with the experiments detailed in THE LANCET of Dec. 19th, 1874, as to the production of the same disease by the injection of the saliva of a healthy dog into the external jugular vein and into the common carotid artery of other dogs, and with the remembrance of the cases reported in THE LANCET of Oct. 10th, 1874, of hydrophobia occurring after the bites of dogs neither recognised then nor afterwards as rabid, can there any longer be a doubt of the occasional production of hydrophobia by the bites of dogs apparently healthy? That such an event is not very frequent may be true, and when it does occur that it may be dependent perhaps as much upon individual susceptibility, from peculiarity of temperament or constitution, as upon any abnormal characteristic of the saliva itself, may be equally true; but in the absence of any power of diagnosis to discriminate who is and who is not the fertile soil in which the specific germs contained in the saliva will produce hydrophobia, surely it should be an axiom that all, even the most trivial dog-bites, should be looked upon as if capable of developing hydrophobia if free cauterisation be neglected.

The instructions, as laid down in text-books on surgery, give detailed and suitable directions as to treatment by excision and cauterisation of wounds caused by bites of rabid animals, but not so of wounds caused by bites of dogs apparently healthy.

If cauterisation by nitrate of silver were effectually adopted in all such cases, and not in a perfunctory and careless manner, as too generally is now the case, hydrophobia would become a disease of less frequent occurrence.

Youatt states that, in his experience, not a single case of hydrophobia occurred, after cauterisation by nitrate of

silver had been effected, in the large number of persons known by him to have been bitten by rabid dogs.

If it be supposed that by invariable cauterisation an undue importance may be ascribed to an apparently simple injury, or that an unnecessary sense of fear or alarm may be generated as to the danger of ordinary dog-bites, it may be replied that this procedure, when accompanied by such an encouragement as the above, imparted to the person requiring cauterisation, would lessen apprehension by convincing the person bitten of his comparative safety after the adoption of such precautionary measures. Indeed, although excision is to be preferred, whenever practicable, after the bite of rabid dogs, yet the measure of the immunity conferred by cauterisation, even after such a dreaded injury, is so reassuring, that the neglect of this precautionary measure after trivial dog-bites will become, after recent experience, a matter to be regretted, and, I may say, reprehensible, on the part of those who omit such an imperative duty.

Pontefract, Yorkshire.

CYST OR WEN ON THE HEAD OF AN INFANT EIGHT MONTHS OLD SUCCESSFULLY EXCISED.

BY JAMES MORTON, M.D.,
SURGEON TO THE GLASGOW ROYAL INFIRMARY.

ON the 18th of February last a child was brought to me from the Highlands of Scotland, said to have a swelling on its head. I expected to find it a nævus, but, when it was uncovered, was surprised to find it like a wen or cyst, situated in the coronal region, an inch and a half posterior to the anterior fontanelle, nearly right over the suture between the two parietal bones, and about an inch anterior to the angle of the lamboidal suture. Its size was that of a small walnut. I was told that a surgeon had punctured it, and that a clear fluid had then escaped by the opening. As the tumour did not appear to be encephalic, not partaking in the respiratory movements, uninfluenced by crying or coughing, and pressure on it producing no cerebral disturbance, besides being non-vascular, rounded, and movable, and the cranial bones being for the age well ossified, I determined to excise it. This was done on the 19th of February, with the aid of my assistant, Dr. A. Cunningham, and Mr. Graham. I pierced it longitudinally with a grooved needle, and then cut through it. The contents were in great part clear serum, with a very little grumous deposit, probably due to the previous puncture. The cyst or sac was strong and thick, not easily separated from the adjacent tissues, requiring careful dissection with the aid of the scissors. Silver-wire sutures were used. The wound suppurated slightly for a few days, but was healed before the 1st of March, when the child was taken home.

The reason for recording this case is the rarity of such tumours in infancy, in my own experience quite unexampled. It had not been noticed at birth, nor for some time thereafter, and it is perhaps proper to add that on removal the cranial bones were found not to be eroded by its weight or pressure.

Glasgow.

SOCIETY OF ARTS.—A conference on the subject of the Health and Sewage of Towns will be held by the Society of Arts on Tuesday, the 9th of May next, at eleven o'clock, and continued on the following day. The object of the conference is to discuss existing information in connexion with the results of the systems already adopted in various localities, to elicit further information thereon, and gather and publish for the benefit of the public generally the experience gained. The introduction of untried schemes will, therefore, not be permitted. The discussion will be taken separately on the following divisions, with the various methods of treatment which have been tried:—(a) Water-carried Sewage. (b) Dry Sewage. The arrangements are in the hands of an influential committee.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

SARCOMA OF THE PALATE; DYSPNŒA; CONTINUED DELIRIUM; LARYNGOTOMY; IMMEDIATE RELIEF.

(Under the care of Dr. GEO. JOHNSON.)

FOR the notes of the following interesting case we are indebted to Mr. Barrow, late surgical registrar.

Edward H. S——, aged fifty-four, a chimney-sweeper, who had been in the habit of drinking freely, was admitted on Jan. 26th, with delirium tremens. He soon became so unruly that it was necessary to remove him to a separate ward. A mixture of chloral and bromide of potassium was ordered, and in the course of a few days he became tolerably tranquil. It was, however, then noticed that he had a sarcomatous tumour involving the roof of the mouth, completely plugging both nostrils, and extending very far back into the pharynx. The growth occasioned great dyspnœa, which seemed to be increasing. The difficulty in breathing was accompanied by loud snoring; and, although when awake the man breathed satisfactorily, when asleep the respiration became so difficult and noisy that every two or three minutes he started up in the bed gasping for breath. He now again became delirious, which state was only interrupted by periods in which he took this very disturbed sleep.

Dr. Johnson expressed the opinion that the delirium was now due to exhaustion from want of proper sleep, and suggested that laryngotomy should be performed, to enable the patient to breathe more freely. Accordingly, on Feb. 28th, Mr. Footner, the house-surgeon, performed the operation; and so pronounced was the effect that the man almost immediately fell into a sound, quiet sleep, from which he did not awake for twenty-four hours. When he awoke, the delirium had entirely subsided; and the general condition of the patient has since most markedly improved, notwithstanding the continued growth of the tumour.

WEST LONDON HOSPITAL.

INTERNAL URETHROTOMY; RETENTION OF THE CATHETER AFTER OPERATION, FOLLOWED BY ABSCESS AND FISTULA; ULTIMATE GOOD RESULT.

(Under the care of Mr. TREVAN.)

IN the following case the catheter was retained, not as a part of the operation, but for the purpose of setting up a discharge and breaking down some of the dense cicatricial tissue into which a portion of the urethra had been converted.

James G——, a healthy-looking porter, aged thirty-seven, was admitted on Oct. 25th, 1875. The patient stated that seventeen years ago, whilst serving in the army at Malta, he contracted gonorrhœa and chancres. One of the sores was situated at the meatus externus, and the urethra became swollen and indurated for several inches. Phimosis followed, and the foreskin was slit up. When he got well an excavated scar was left at the urethral orifice. He did not suffer from constitutional syphilis, but he had a gleet on him for seven months. A year ago he was attacked with retention, which was only relieved by the hot bath, as the surgeon failed to pass any instrument. For the past three months he has only urinated in drops.

On examination, the penis was found large and indurated, and the urethra felt as if it contained a metal catheter. There was an excavated scar at the meatus externus, which was so contracted that it would only admit one of the finest filiform bougies. A second stricture could be felt at the root of the penis encircling the urethra like an iron band. Micturition could only be performed guttatim.

On Oct. 30th, at 3 P.M., ether was administered by Mr. Alderton. As Mr. Teevan could not pass any director, he introduced a fine bougie, and enlarged the urethra for one inch with a tenotome. The second stricture was then examined, and found only to take a No. 1 English elastic catheter. A fine "bougie conductrice" was then passed, and the catheter staff screwed on to it and introduced into the bladder, the situation of the instrument being demonstrated by the escape of some urine. Both strictures were then divided in the roof from before backwards, and the urine withdrawn through a large metal catheter, which was immediately taken out. As there was so much dense cicatricial tissue, a No. 10 English elastic catheter was passed and retained *in situ* for the express purpose of setting up a discharge and breaking down the induration.

31st.—Mr. Alderton found the pulse 84 and temperature 100·2°; tongue furred. The patient had had a sleepless night.

Nov. 1st.—10 A.M.: Pulse 90; temperature 99°. No sleep last night. At 7.30 P.M. Mr. Teevan removed the catheter, as there was much tumefaction of the penis.

5th.—As the swelling of the penis had increased, and as there was much tenseness of the parts, Mr. Teevan made three incisions, each half an inch long, into the root of the organ. Bloody serum escaped freely. Temperature 100·4°; pulse 96. Patient had passed a good stream of urine through the meatus after the catheter was removed.

6th.—Some pus escaped from one of the incisions.

8th.—Urine observed to pass from one of the cuts.

10th.—Patient was in good heart and comfortable.

15th.—Up and about the ward. No. 15 French olivary catheter passed with ease into the bladder.

16th.—Patient in bed again, as he felt thirsty and feverish. Pulse 102; temperature 104.

17th.—Penis and scrotum greatly swollen from an attack of erysipelas.

20th.—Erysipelas nearly gone. Pulse 78; temperature 98·4°. Pus escaped freely from incision.

27th.—Much better. Up and about ward. Taught to pass No. 10 French olivary catheter, and ordered to draw off his urine whenever he wanted to micturate.

From this date the patient gradually improved, and he left the hospital on Dec. 19th, able to pass a large stream of urine and to hold his water for eight hours, a small quantity of it escaping through the fistula. The patient attended as an out-patient twice a week to have a large instrument passed, the whole of the urine being always carefully drawn off by the patient. Success rewarded his perseverance, for by Jan. 31st, 1876, the fistula was quite healed.

Mr. Teevan observed that internal urethrotomy could boast of a splendid series of successes, such as no other operation for stricture could even approach. He knew that it had been performed by four different surgeons one thousand and thirteen times with but three deaths, one of which would probably not have occurred had it not been for the crowded state of the Hôpital Necker during the Commune. Hence, therefore, when a *contretemps* such as he had described followed the operation, it was only due to urethrotomy to make it public and court inquiry. He knew that perineal abscess and fistula had occurred in a patient after the operation of so-called immediate dilatation, but the surgeon had not thought fit to publish the case. He had every reason to be highly gratified with his results after internal urethrotomy, never having had a death or accident, and he considered the abscess which had formed in the present instance had been caused entirely by the catheter which was left in the bladder. He no longer retained an instrument after any form of urethrotomy, as he felt convinced that it annoyed the urethra and retarded the patient's recovery. The present case added one more to the many adduced by Dr. Gouley, of New York, in favour of dispensing with the services of a catheter after urethrotomy.

DERBYSHIRE GENERAL INFIRMARY.

TWO CASES OF TRAUMATIC TETANUS.

(Under the care of Mr. BAKER.)

FOR the following notes we are indebted to Mr. Prideaux, assistant house-surgeon.

The first case was that of B. K——, aged twenty-nine, a domestic servant, admitted into the Alexandra ward on Dec. 15th, 1875, with the following history. Three days previously she was struck on the inner side of her left foot with the edge of a beer-barrel, which crushed off a flap of skin and muscle, and bruised the parts around. A neighbouring surgeon replaced the flap, which was kept in position by sutures. She suffered very great pain, and was unable to sleep. On admission she had a worn and anxious expression. The injured parts were discoloured, hot, and tender to the touch. Poultices were ordered, and, as she seemed unable to take solid food, a liquid diet with extra beef-tea was ordered, and twenty grains of chloral at night to relieve the pain and to induce sleep. For the first two or three days she seemed to get a little better, but the aspect of the wound did not improve. On the third day after admission the sutures were removed, and it was seen that not the slightest attempt at union had taken place between the crushed flap and the rest of the foot, while both surfaces of the wound had assumed a dirty, sloughy aspect, and it was feared that the whole of the flap would slough right off. Her general health was not bad, however, and she took a fair amount of nourishment. She slept well after an opiate every night, as the chloral was discontinued after the first two nights, but she always complained of a great deal of pain in the foot. She was ordered a mixture of bark and ammonia three times a day, and poulticing to be continued. The sloughing of the flap still went on, and not only the flap, but all the tissues around, deep into the sole of the foot, became sloughy, until on the 22nd the under-surface of the os calcis and part of the astragalus could be perceived. There the sloughing seemed to stop, a distinct line of demarcation being observable on the outer surface. On the 23rd she complained for the first time of some pain and stiffness about the side of her neck when swallowing, and a choking sensation at night. No notice was, however, taken of it beyond ordering a poultice to the side of the neck.

On the 24th these symptoms increased, so much so that she screamed with the pain, whilst there was decided trismus, her jaws being only open about half an inch. She was ordered a mixture containing forty grains of bromide of potassium and two drachms of the juice of conium every four hours, and that night had a subcutaneous injection of one-third of a grain of morphia. The next day she was slightly worse. The injections of morphia were continued about three times a day, and seemed to give her great relief from pain. She was ordered four ounces of brandy and the same of port, with as much beef-tea and milk as she could take. She experienced considerable difficulty in swallowing, but was generally able, by taking small quantities at a time, to take all that was given her.

On the 26th she had a few slight attacks of opisthotonos, and complained of great pain in the pit of the stomach and at the bottom of the back, and also of a pain passing down both thighs, but more severe on the left side. Her abdominal muscles were hard and tense, and she had a constant twitching of both arms. She continually grasped tightly the handle of the bed-rope, held herself up during the spasms, and never let it go even when asleep.

On the 27th, no apparent change. Ordered enema of castor oil, followed by two drops of croton oil and ten grains of extract of hyoscyamus, after which her bowels were opened copiously. Fomentations of turpentine to the abdomen. Injections of morphia were discontinued, and enema of forty grains of chloral ordered at night. Temperature, morning, 98·6°; evening, 101°.

On the 28th, at a consultation held as to the advisability of removing the foot, the internal plantar nerve was discovered deeply down, stretching across the wound. As the nerve was very much lacerated, and its fibres separated from one another, it was divided. It was decided, however, as she seemed much exhausted, to defer amputation until a further examination the next day. She was ordered enemata of chloral, forty grains, at intervals, alternately with enemata of beef-tea and brandy, with inhalation of chloroform during her spasms. These latter gave her great relief, but during the day her jaws relaxed a great deal and were hardly ever firmly fixed, whilst the spasms she had were very slight and never impaded her breathing. Temperature, morning, 103°; evening, 101.

On the 29th she seemed to be much exhausted and almost unconscious, pulse feeble and slow; both the nutrient and chloral enemata were continued, but she had no spasms, and her jaws were completely relaxed. Up to this date she

had been always able to swallow her medicine, but she seemed at this time to choke when it was administered. She was ordered ether mixture, which she took comparatively well; but her mouth and lips were dry and covered with sordes, her tongue was brown, and her pulse was quite imperceptible at the wrist in the afternoon. She was ordered the ether mixture every half-hour, and seemed to rally a little, but towards evening she again began to sink, became unconscious, and finally died at 1.40.

CASE 2.—M. M——, aged twenty-nine, a collier, alleged to have been a very healthy and temperate man, not subject to fits of any kind, was admitted into Albert Edward ward on Jan. 4th. He stated that twelve days previously he accidentally jammed and crushed the middle finger of his right hand between the wheel of a waggon and his own cab. The wound was at once bound up by a friend, rather tightly, and left untouched for eight days, during which time he suffered so much pain that he was unable to sleep; indeed, he alleged that since the accident he had not taken off his clothes. For some days before admission he had had an aching and soreness between the shoulders, and on the morning of admission he felt the lower jaw becoming stiff. The stiffness rapidly increased. He had not felt any twitching or spasmodic pain in any part of his body. Appetite not particularly impaired; bowels open, regular. On admission he could open his mouth only half an inch; the temporal and masseteric muscles seemed stiff and hard; he kept his neck erect, and it appeared somewhat stiffened. There was a dirty-looking, sloughy wound of the upper part of the middle finger of the left hand, on the palmar aspect, exposing the ungual phalanx, and the sloughy character extended to about the middle of the finger, but not quite so low on the dorsal aspect.—7.30 P.M.: Temperature 98·6°; some twitching extending from ramus of jaw to acromion of left side; jaws much closer together and more firmly fixed. Ordered thirty grains of chloral every two hours, beef-tea and brandy.—At 9 P.M. chloroform was administered in order that the finger might be amputated, but he did not take it well. It soon produced violent tetanic spasms, which increased in severity as the inhalation was proceeded with, and at last, in consequence of the great amount of dyspnœa and lividity of face, together with the very violent opisthotonos, it was discontinued. The finger was then removed, the patient being in a semi-unconscious state.—12 P.M.: Trismus in about the same condition; says he feels comfortable; takes fluids pretty well. Blister ordered to back of neck. Slept well until 1.30 A.M., when he had a severe attack of spasms, during one of which he bit his tongue, and from that time seemed much less able to take either medicine or nourishment; although he tried to suck through a tube, yet the power of deglutition seemed to get much less during the night and morning.

Jan. 5th.—10 A.M.: Ordered simple enema, to open the bowels; motion liquid. Afterwards ordered an enema of beef-tea and brandy every hour, which he retained very well. During the morning nurse stated he took scarcely more than half a dose of chloral. At 12.30 he had a severe attack of opisthotonos, caused by his being slightly moved. 1.30: Lies upon his back, which is arched; muscles hard and rigid, can separate his jaws about one-third of an inch; quite unable to swallow, any effort to do so appearing almost to suffocate him. Tongue coated with dirty-white fur. Pulse 116, good volume; temperature, 97·8°. Micturates voluntarily. There is some slight twitching of muscles of face, and he is quite unconscious.—2.45: A series of most violent spasms came on; the opisthotonos was so marked that his body was raised off the bed, became quite black in the face, and ceased breathing entirely, but his pulse continued good. After three or four minutes of artificial respiration he began to gasp, and after the inhalation of a considerable quantity of chloroform his muscles completely relaxed, and he became quiet. Passed fæces during attack. Temperature after, 98·4°; pulse 120. Had an enema at once of a drachm of chloral. He had two more violent attacks of spasms at intervals of half an hour. During these attacks artificial respiration and chloroform were used successfully; some bloody frothy sputum was blown from between his lips. Half a drachm of chloral was ordered every hour by the bowel, and after the first two enemata it was added to the beef-tea and brandy. From this time, although he had at first several violent attacks, still they were at longer intervals, and became much less severe in character; during the intervals he slept quietly, with complete relaxation of his muscles. He retained the enemata well.—6 P.M.: Spasms very slight, with hardly any great dyspnœa; good pulse.—9 P.M.: No spasms for a long while, and then only a slight starting; lies quietly sleeping upon his right side, breathing quietly; pulse 116, full. He went on in this manner, taking his enemata well, when at 10.50 he was seen to start suddenly in his sleep and die instantly, without any particular dyspnœa, neither did he become particularly livid, but his pulse, which had been previously good, suddenly stopped.

When the spinal cord was laid bare it was found to be in a state of extreme congestion, even the most minute veins being gorged with blood. On making a section, some parts of the cord seemed softer than natural, and here also the vascularity was marked, the smallest vessels showing when cut across.

Remarks.—There was a marked and interesting contrast between the two cases. The first might in comparison to the other be almost called subacute, whilst the last was most acute. In the first case, the onset and progress of the disease were slow and gradual, the woman remaining conscious nearly all the time; the spasms were never severe, respiration was never interfered with to any extent, and she was able to swallow almost up to the last. The symptoms of the disease also disappeared for twelve hours before death, which took place in a most slow and gradual manner, her pulse being quite imperceptible for hours before she died. On the other hand, her temperature rose above the normal for several days, and went as high as 103°. In the second case, the onset of the disease was sudden, death taking place within thirty-six hours from commencement of trismus. The spasms were very severe, respiration and deglutition interfered with greatly, yet with all this the temperature did not rise above the normal. The pulse was good and strong, and the patient died very suddenly, and yet without any apparent interference with his respiration. Did he then die from spasm of muscular tissue of the heart? It is stated that in these cases of sudden death, it takes place from spasm of the muscles of the glottis, but there surely would have been more apparent interference with the function of respiration than appeared in this man if that had been the cause of death in this case. In the first case death was evidently due to exhaustion, but not so in the second.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

AT the meeting of this Society on the 24th of March, Dr. Greenhow in the chair, in the absence of the President, several cases were brought forward, the most important being one of recovery from a severe attack of cerebral symptoms, related by Dr. Goodhart. Some useful surgical apparatus was also shown. It was announced that the next meeting of the Society will not take place until April 25th.

Mr. HOLMES related a case of Excision of the Ankle-joint to show the use of Linhart's chisel. This instrument, invented by Professor Linhart, of Wurzburg, but little known in England, is a stout chisel with an oblique edge, having a thick back, on which is a projecting ridge to catch the hammer by which the instrument is driven through the bone. The edge is pressed firmly into the bone, in the direction in which the incision through the bone is to run, and has the advantage of making a smooth and continuous incision in a bone in the required direction, it being necessary only to make an incision down to the bone. In the case related (the only object of the relation being to bring forward the instrument) an incision was made down to the astragalus, which was readily cut across and removed, and the other osseous surfaces excised by means of the chisel. In order to use the chisel the bone must be firmly supported.—Mr. PICK testified to the value

of the instrument, which he had used in three cases—viz., exostosis, necrosis of the shaft of the femur, and partial removal of the lower jaw. In the latter case it failed, owing to the want of firm support to the bone.

Dr. GOODHART read the notes of a case of Headache, Double Optic Neuritis, and Blindness, which has ended in recovery. The patient, a girl twenty-one years of age, a pupil teacher, was first seen by Dr. Goodhart on December 21st, 1874. As to the history, the parents were healthy, but two sisters had died of phthisis. No cause could be assigned for the illness, but on careful inquiry it was ascertained that she had had a severe blow on the right temple some months before, causing great pain, though not followed by any symptoms. She was very intelligent, and had been working very hard, both in teaching and for an examination, before the attack. The first symptom was headache, which began on December 10th, and lasted a week, but she continued at work till the 20th, when sore-throat occurred. In the night of the 21st intense headache came on, with severe vomiting, which continued, and was repeated on taking any food. Dr. Goodhart saw her on the 23rd, when there was intense general headache, and constant vomiting and retching. The light of a candle caused much pain. The skin was cool, temperature normal, pulse 52, irregular, abdomen retracted. There was no paralysis. On the 24th the vomiting continued. There was occasionally double vision, the sight of the right eye was dim, and on ophthalmoscopic examination commencing optic neuritis was found in both eyes. Next day the headache continued, and was at times very severe, causing the patient to cry out. There were occasional slight suffocative attacks, but their cause could not be precisely determined. Pulse 48; pupils acted well; retching on taking food. On the 26th, although she had slept better, there was some slight mental disturbance, intense pain on the right side of the head, face, and neck; pulse 48. No tache cérébrale; sight was much impaired, the pupils somewhat dilated; slight paralysis of external recti muscles. Mr. Higgens, who now examined the eyes, found extreme venous engorgement of the retina and optic neuritis, most advanced in the right eye. Next day, a transient attack of slight left hemiplegia, following intense headache, and lasting two hours, was said to have occurred by the patient's mother, a very intelligent and experienced nurse. The speech had also been slightly affected. The sight became still more impaired, total blindness developing in the right eye, and light only being perceived by the left on the seventeenth day from the attack. But the acute symptoms, with the exception of some vomiting, subsided, and the health was gradually restored. The sight was also gradually recovered up to a certain point, though still impaired. Some atrophy of both optic discs, especially of the right eye, remains at the present time, and there is still a tendency to vomiting and retching after solid food. The patient is hypermetropic, and the field of vision small. She was treated mainly by the application of cold to the head, iodide and bromide of potassium, purgatives, and small doses of mercury-with-chalk internally. Dr. Goodhart said that, from the sudden onset of the symptoms, the early optic neuritis, and the absence of any pyrexia, he was inclined to the view that the disease was one implicating the substance of the encephalon rather than the membranes. A tubercular family history, the appearance of the patient, and some history of a previous blow, led to the conclusion that the affection was probably a yellow tubercle, while the symptoms narrated indicated that the lump was probably a small one, situated on the right side rather than the left, at the upper part of the pons Varolii. The occurrence of temporary hemiplegia, after a severe attack of headache, and the persistence of a tendency to retch after all urgent symptoms had subsided, were amongst interesting features of the case. But he brought it forward mainly in order to elicit discussion as to its nature.—Mr. JOHN COOPER remarked that a nearly complete loss of sight and subsequent recovery were not nearly so rare as Dr. Goodhart thought. He mentioned a case of double optic neuritis in a boy who was suffering from severe albuminuria, who had a quantity of opaque exudation around the disc, and streaks of hæmorrhage. For several days there was almost absolute blindness, the sight being subsequently slowly recovered, so that he could read Jaeger No. 6. But in the recovery of vision no change was to be seen in the condition of the fundus, but the mental condition improved, the lad having previously been in a drowsy stupid condition.—Dr. GREENFIELD remarked that the case mentioned by the previous speaker seemed to belong to a different class from Dr. Goodhart's; the condition of the eyes was that of albuminuric retinitis, and the loss of vision was probably a form of amaurosis such as sometimes occurs in Bright's disease, independently of affection of the eye. In Dr. Goodhart's case, he was inclined to the belief that the symptoms might be due to a primary optic neuritis, and the extension of slight inflammation backwards along the optic nerves to the base of the brain, where other nerves became involved in the morbid process. The early intense affection of the eyes, and the nature of the changes seen at the onset, pointed to this rather than to a descending neuritis due to cerebral disease, where a condition of ischæmia usually precedes the neuritis. Vomiting may occur as a symptom of optic neuritis apart from brain disease. The absence of localised paralysis, the course of the implication of the nerves, the slight degree of their affection, and the speedy recovery, pointed to this hypothesis of a slight basal meningitis, insufficient to raise the temperature notably. Slight paralysis of both sixth nerves was extremely common in all forms of brain disease affecting the base, and he thought this was due to their long and exposed course. He had seen a somewhat similar case, with very severe symptoms, in which, however, the patient recovered, but with total loss of sight.—Mr. MACNAMARA observed that we should be very careful to guard against coming to a conclusion as to prognosis from mere ophthalmoscopic appearances, and the amount of effusion about the optic nerve. In cases of sunstroke it was not at all rare to see the entrance of the optic nerve covered with exudation, but the sight rapidly improves with absorption of the exudation. So also in malarial cases, hæmorrhagic spots &c. might be seen over the disc, but the sight rapidly improves. Even with much effusion over the disc, the vision is often but little impaired. A deep-seated lesion was usually the cause of such symptoms, and he thought the symptoms and course pointed to a syphilitic gumma.—Dr. TAYLOR remarked that the severity of the symptoms might lead to an erroneous diagnosis. In children there might be very serious symptoms, leading to a bad prognosis, from which recovery occurred, even after a long period. Thus he had seen a case where a child, comatose and blind for three or four months, with also partial hemiplegia, recovered. In one case he had an opportunity of examining the brain several years after such symptoms, and found only a slight lesion. He had often seen patients with blindness, vomiting, and some optic congestion; but for the most part they recovered perfectly.—Dr. BUZZARD said that, from his experience, he should say that the symptoms described were due to some coarse lesion in the form of tumour, and that, probably, a syphilitic gumma, from its ready cure by iodide of potassium. As to the distinction between choked disc and optic neuritis, he was unable to distinguish them so as, in any given case, to say which existed.—Mr. EVANS doubted the existence of the hemiplegia, and thought it hysterical.—Mr. LAWSON believed that there was a great difference between choked disc and optic neuritis.—Dr. GOODHART, in reply, said that there was no suspicion or probability of syphilis. He ventured to protest against Dr. Buzzard's view that a gumma had existed because iodide of potassium was given and the patient recovered; for certainly iodide of potassium did good in promoting the absorption of pleuritic effusion and the subsidence of strumous joint affection and of other simple tumours. He thought it was a most dangerous doctrine. In certain stages, choked disc and optic neuritis were difficult to distinguish. The course of the case seemed certainly to favour the view of extension from the disc itself. One fact of importance was that the catamenia came on, and some relief occurred; Pagenstecker had related cases of optic neuritis associated with menstrual disturbance.

Mr. TREHERN NORTON related a case of Cleft Palate operated on in a girl thirteen years of age, in which a peculiar form of obturator was devised in order to supplement the uvula and soft palate, which were deficient, and caused impairment of speech and swallowing. The defect was remedied by an artificial uvula of soft india-rubber made to slide over and be attached to a metal obturator. (It would be impossible to explain the apparatus without the aid of a diagram.)—Mr. FRANCIS MASON said, in reference to some

remarks by Mr. Norton as to the inutility of dividing the velum palati on each side so as to form an artificial uvula, an operation which he had introduced, that the uvula thus formed *did* act, however it might be explained, and the voice was usually improved.

Mr. LAWSON read a case of large Hydatid Tumour, which he had recently removed from the orbit. The history of the case was as follows. The patient, a fisherman, twenty-nine years of age, first came under his care at Moorfields Hospital in October, 1872, suffering from protrusion and eversion of the left eye, with considerable impairment of vision. All these symptoms had been developed in ten weeks. On admission there was proptosis of the left eye to about half an inch beyond the orbit, with complete divergence of the eye. A soft mass could be felt at the upper and inner part of the orbit, which had a sense of fluctuation. The field of vision was normal, and he was able to count his fingers at a foot's distance. With the ophthalmoscope the optic disc presented the appearance of "choked disc"; on direct examination the swollen nerve seemed to stand out from the fundus, and the vessels of the fundus were extremely tortuous, especially the veins as they passed over the margin of the papilla. Mr. Lawson punctured the tumour through the upper eyelid, and two drachms of clear fluid escaped, which could not be examined. The patient was not seen again till Feb. 14th of this year, when he was admitted into the hospital for the removal of the greatly increased tumour. The protrusion and eversion of the eye were also much increased, and the sight so impaired that he could only distinguish shadows. The tumour was removed under ether, the upper eyelid cut through so as freely to expose it, then it was punctured and a quantity of clear water escaped, and with it two or three small daughter cysts. The parent cyst was drawn out entire by forceps. The patient progressed favourably, the wound suppurated, and the eye immediately began to recede. He left the hospital in the following week. The sight had improved so much, that he could read No. 20 of Jaeger's types. Mr. Lawson remarked on the extreme rarity of cases of hydatid cysts in the orbit—Dr. Cobbold had informed him that there was only one other on record in England, a case of Mr. Hulke's, of which the preparation is in the Middlesex Hospital Museum,—and on the fact that choked disc was produced by the pressure of a tumour on the optic nerve, and the return of the disc to its normal appearance on removal of the pressure by tapping the cyst. Although it had been long known that tumours pressing on the optic nerve would produce choked disc, in no other case had he seen the fact so clearly demonstrated. The tumour was removed without injury to the eye.

Reviews and Notices of Books.

Diseases of Modern Life. By BENJAMIN WARD RICHARDSON, M.D., M.A., F.R.S., F.R.C.P. London: Macmillan. 1876.

EACH generation finds itself, for the most part, a mere link in the chain by which disease is transmitted. The torch comes to us from a distant past, and is handed on by us to a distant future. But no generation passes it on just as it receives it. In substance the same, in form it is always changing. Some old diseases become less frequent, if they do not disappear; and new forms of disease, or at least new modifications of old forms, make their appearance. These have their origin in the changing conditions of life, changing habits, changing climates. Medicine in its widest scope has for its object the extinction of old, the prevention of new forms of disease. Both ends are aspects of the same task. The first essential for the prevention of disease, old and new, is the diffusion of sound popular knowledge respecting its causes, its general nature, and the influence exerted upon it by various conditions of life. To diffuse such knowledge, to awaken a wise popular opinion and an effectual popular action, are the praiseworthy objects of Dr. Richardson's treatise. Although primarily intended for the public, there is much to interest and instruct even the well-informed practitioner. The task is well performed, although on some points we cannot agree with the conclusions which are reached. A forcible, graphic style lends additional interest to the subject.

The work is divided into two parts, of which the first considers the accidental and general, and the second the induced and special phenomena of disease. The volume opens with a sketch of "natural life to natural death," the euthanasia of senility. The relations of disease to time, space, and race are next considered, and the belief is expressed that no old diseases die away entirely; they reappear in sporadic form from time to time, even affections so rare as the "sweating sickness" or the "black death." The consideration of health in relation to race involves a discussion of some of the interesting sanitary relations of the Jews, to which Dr. Richardson has devoted much attention. He records also some interesting observations which tend to show that the Saxon race is more prone than others to phthisis, and that in them inherited taint is a more powerful cause, while in individuals of other distinct races the disease had in most instances been acquired by the sufferer.

In speaking of disease antecedent to birth, Dr. Richardson points out the wide range of inherited proclivities and tendencies, and he speculates that the seat of the inherited mischief is nerve trunk or centre. This opinion is based in part on the strong hereditary character of nervous diseases, taken in conjunction with the marked inheritance in the lower animals of peculiarities the result of experiment upon them. But we are not aware of analogous evidence of the transmission in man of nervous peculiarities altogether acquired.

The external uncontrollable causes of disease are next passed in review. The influence of season on health and disease is illustrated by Milner's curious observation on the effect of season on the weight of convicts, which show that during winter the body wastes, and gains in weight during the summer. A wide comparison of the Registrar-General's tables shows a similar variation in the mortality from diseases, both from those promoted by meteorological influences, as bronchitis and pneumonia, and from diseases of very different origin. Some of these meteorological influences are, Dr. Richardson has long believed, related to the presence of ozone, and he looks forward to the time when by a careful comparison of the amount of ozone, temperature, &c., outbreaks of disease may be predicted at least as certainly as storms at sea. The external and communicable causes of disease introduce the subject of contagion. The germ theory is dismissed as destitute of any foundation beyond a barren analogy. Dr. Richardson believes that the poisons themselves are modified secretions of the living animal arising in accidental modification of those secretions. This part concludes with a sketch of the phenomena of disease incidental to old age and decay.

Foremost among the causes inducing phenomena of disease come worry and mental strain, which furnish the subject for a thoughtful chapter. By a happy turn the reality of "broken hearts" is strongly insisted on, and the phenomena of cardiac failure which result from nerve strain are fully described. Mental work is injurious only when excessive, only when it absorbs all other interests and energy. The effects of physical strain are next considered, and the evil of excessive physical exertion by those unaccustomed to it is strongly dwelt upon. The writer points out that the persistent and hardy energy of the Jews has been entirely irrespective of any set attempt, direct or indirect, to develop their physical capacity.

Three important chapters are devoted to a discussion of the alcohol question. It is well known that Dr. Richardson is an extreme opponent of the need for or advantage of the use of alcohol—nay, maintains that it must be and always

is, *per se*, injurious in quantities great or small. We hope to direct our readers' attention more fully than is possible in the limits of a review to the aspect of the questions of which Dr. Richardson is one of the ablest exponents. His conclusions from physiology are not those which most scientific men believe the facts warrant. His description of the physiological action of alcohol is followed by an account of the various functional and organic diseases to which its excessive use may give rise, and he points out, in conclusion, how many of the morbid states which it causes may be transmitted hereditarily to the offspring.

Considerable space is also given to diseases resulting from the use of tobacco. The habit of smoking finds in Dr. Richardson, as is well known, an uncompromising opponent. He gives a detailed account of the chemistry of tobacco combustion, and of its physiological action upon an individual unaccustomed to its use. The popular (?) notion that tobacco-smoking causes cancer and consumption (which with regard to the former has probably arisen from the occurrence of epithelioma of the lip) is refuted at length. Dr. Richardson believes that there is no ground for assuming that organic disease results from the use of tobacco, but he believes that functional disorders are inseparable from the habit of smoking, and he gives a long description of the various disorders which he believes he has traced to tobacco. The picture which he draws is sufficiently alarming: from stomach to brain, from blood-corpuscles to sympathetic nerves, all is disordered. His statements are probably in the main accurate as regards the effects of smoking when excessive, but they are certainly too sweepingly applied to all smoking, moderate and slight, as well as extreme. We believe that the majority of moderate smokers would show no more evidence of the morbid states Dr. Richardson graphically describes than average non-smokers, and we do not think that the experience of most observant members of our profession will endorse his statement, that of all Englishmen who smoke "not one can be writ down as in perfect health from day to day," but that all have "stomachs that only partially digest, hearts that labour unnaturally, and blood that is not fully oxidised." He does, however, elsewhere reluctantly admit that under certain circumstances tobacco helps to bring unnatural into natural function, producing, in the overwearied brain "mental rest, partial oblivion of the past, and a tendency to that natural sleep which knits up the ravelled sleeve of care."

Under the head of disease from narcotics, the phenomena of "chloralism," as Dr. Richardson aptly terms it, are fully described. He was, indeed, one of the first to call attention to the symptoms which attend the abuse of chloral. There is nothing in the description which he gives of the nervous symptoms with which our readers are not already familiar, but his explanation of some purpuric symptoms which occasionally follow the use of chloral is of considerable interest. By the action of the soda of the blood, chloral being broken up into formic acid and chloroform, the blood becomes "charged" with formate of soda, is increased in specific weight, is rendered unduly fluid, and "with its plastic constituent in persistent solution, it readily escapes from the contained vessels. In this manner diseases closely resembling scurvy and purpura are induced, and are sometimes extremely difficult of cure. I have known the body covered with purpuric blotches from this cause."

The chapter on Disease from Food discusses the effects of excess in food, of errors in its selection, of parasitic diseases acquired from food, and of the evils attending the consumption of putrefying meat. A well-timed protest is made against the fashionable practice of eating game "high." Disease from impurity of air is next considered, as resulting from organic contamination, sewer contamination, and from damp. The influence of damp houses in causing both acute rheumatism and consumption is illustrated from the author's own experience. The important discovery by Dr. Buchanan of the relation of subsoil drainage to phthisis is another aspect of the same fact which might with advantage have been introduced.

Under the head of Disease from Occupation, the various callings, professional, commercial, and mechanical, are passed in review in their relation to mental and physical health, and the several maladies to which they predispose are indicated. The professional classes have evidently furnished Dr. Richardson with a field for wide and careful study, and he analyses with much subtlety the methods, direct and indirect, in which their occupations induce disease. Overwork and over-anxiety are strongly condemned. In a section on the educational relations of the subject the author points out how disastrous may be the result of developing, by special cultivation, any special faculty, to the neglect of more general culture. Broken sleep is assigned a high place among the causes of disease of the nervous system. Dr. Richardson deprecates not only deficient but discontinuous rest, urging that the two are almost equally prejudicial—an opinion in which many members of our profession will hardly concur.

A very useful chapter is that upon Disease from Errors in Dress. There is no subject on which education of public opinion is more urgently needed. The mechanical errors are well known in theory, if still neglected in practice. But less familiar are the results of errors in change of dress in so uncertain a climate as our own, which are fertile sources of disease. Among points incidentally developed are the common errors of mistaking weight for warmth in both bedclothes and ordinary garments, of wearing dark clothes during the warm summer weather, and of imperfect ventilation of dress.

The next chapter is on Disease from Imitation and Moral Contagion. The "motional" type of imitative diseases, as exemplified in chorea, is compared with more purely ideational types, as seen in the religious epidemics; and they are connected by a strange theory of the physical nature of moral contagion, which ascribes it to "a disturbance in the ethereal matter, which charges the living organism throughout its entire extent, and is the medium of communication between ourselves and the outer universe which surrounds us."

Some of the strange automatic manifestations of disease are considered in the next chapter, as shown especially in hysteria and hypochondriasis. Among the causes of the latter we are not sure that popular treatises on the causes and symptoms of modern diseases should escape enumeration, however useful and necessary such treatises may be in lessening the frequency of other maladies. The facts enumerated in the chapter on the "Intermarriage of Disease" are of much interest. Dr. Richardson agrees with most authorities in condemning marriages of consanguinity, but chiefly as involving a like taint in both parties. He points out that the intermarriage of different diseases is hardly less dangerous than intermarriage of the same disease, and mentions an instance in which a young man of marked cancerous proclivity married a woman whose parents had both died of pulmonary consumption. Their five children died from lupus, phthisis, cerebral tubercle, diabetes, and cancer respectively. The intermarriage of rheumatism and consumption "is productive of intermediate maladies in which the bony framework of the body is readily implicated. Hydrocephalic children and children suffering from hip-joint disease are frequent results of this combination." Dr. Richardson looks forward to the time when this subject will be so formularised that the physician will be able to predict,

with arithmetical accuracy, the results of the combinations of disease from marriage. But the fact that knowledge is not power almost forbids us to expect that such knowledge will control the result. "In the present state of our civilisation rank and position are considered all-important elements in the marriage contract; wealth is considered; relative age is sometimes taken into account; religion and race are often made subjects of serious moment. Hereditary health as an element of the marriage contract, of what import is it? Who are so lightly studied as the unborn?"

An aphoristic summary of practical applications closes Dr. Richardson's volume. The book is certain to be of service in the cause of public health, and will add to the author's well-earned reputation as a popular teacher.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D. London: H. K. Lewis. 1876.

This is a new edition (the third) of a popular work, and it will only be necessary to direct attention to the changes that have been made in it. In the first place, it is considerably enlarged. Rötheln and cerebro-spinal fever, epidemics of which have occurred in New York since the appearance of the last edition, are now considered for the first time, and the article on Diphtheria has been altogether rewritten. It is a good practical treatise, and the author's views are based upon the results of considerable personal observation and practical experience.

English Chess Problems: containing in Parts I. and II. a Selection of the Best Problems by English Composers, living and lately deceased; and in Part III. a Set specially composed for this Work, and not hitherto published. Edited by James Pierce, M.A., and W. Timbrell Pierce. London: Longmans and Co. 1876.

It is unnecessary to do more than call attention to this work; for it speaks for itself in its title. It is almost a platitude to say that no game equals that of chess for intellectual enjoyment, and this volume forms a first-rate collection of problems. It contains, in the first and second parts, a selection of the best problems by English composers living and lately deceased, and in the third part a set specially composed for this work, and not hitherto published.

The Monthly Microscopical Journal. No. 88. April, 1876. Edited by Henry Lawson, M.D. London: Hardwicke.

This part contains five original articles, none of which, however, are of much interest from a medical point of view. They are—1. On a New Arrangement for Illuminating and Centering with High Powers, by the Rev. W. H. Dallinger, V.P.R.M.S. 2. The Identification of Liquid Carbonic Acid in Mineral Cavities, by Wallis N. Hartley. 3. On some Structures in Obsidian Perlite and Leucite, by Frank Rutley. On the Aperture of Object Glasses, by F. H. Wenham. And 5. On Zeiss's $\frac{1}{17}$ Immersion, by W. S. Hickie, M.A. This last seems to be a very fine power.

THE ARMY MEDICAL REPORT FOR 1873.

[Second Notice.]

The Appendix to this volume leads off with one of those practical summaries to which the late Dr. Parkes had accustomed us—viz., a Report on Hygiene for the year 1874 and part of 1875. Under the heading of Air, we find a reference to Dr. de Chaumont's paper "On the Theory of Ventilation," read before the Royal Society, from which we extract the following data. After calculating the amount of fresh air which must be supplied per hour according to the standard of permissible impurity (which he takes as ·0002 of CO_2 per cubic foot, or ·0006 if the atmospheric carbonic acid is included), Dr. de Chaumont lays down the following conditions as the standard of good ventilation in this climate:—Temperature, dry bulb, 63° F. to 65°; wet bulb, 53° to 61°; vapour not to exceed 4·7 grs. per cubic foot at 63°, or 5 grs. at 65°; humidity not to exceed 73 to 75 per cent.; carbonic acid, respiratory impurity, no to exceed ·0002 per cubic foot. Under the section appropriated to the "Spread of the Specific Diseases," we shall pass over enteric fever, and advert to some points in connexion with cholera. Dr. Parkes, first of all, gives a summary of the conclusions arrived at during the International Sanitary Conference which met at Vienna in 1874, drawn from the published report or "procès-verbaux," and then proceeds to discuss from Prof. Hirsch's work the causes of the outbreak and spread of cholera in Posen and Russia in May to September, 1873. The experience of former years has proved that when cholera enters Prussian Poland from the adjoining Prussian districts, it does so by water, and is chiefly spread by the wood and grain rafts, and the other traffic on the Vistula and other rivers. After giving the details at much length, Hirsch proceeds to formally state the mode of spread of cholera. He says the fact is confirmed on all sides that the introduction of cholera into Prussian Poland and Prussia was by the Galician raftsmen, and that this was "invariably" the case. Then from the towns or villages where the cholera was thus introduced, and where it spread epidemically in some cases, it advanced by inland traffic to places lying far from the river. Hirsch seems to have no doubt of the influence of impure drinking-water in spreading cholera, but he still thinks it undecided—(1) whether the impure water contains something *specific*; or (2) whether the water merely exerts an injurious influence which predisposes to an attack.

Dr. M. Frank, who is what we should call the Medical Officer of Health for Munich, has published a work on the Epidemic Cholera in 1873-74. One of the most important parts of this work deals with the ground-water hypothesis of Pettenkofer. Not to go into details, it seems certain that no connexion could be maintained between the changes in the ground-water and the cholera cases, and Pettenkofer's hypothesis has thus received, says Dr. Parkes, a severe and perhaps fatal blow in the very place where the evidence was supposed to be most favourable to it. The evidence in Munich was by no means clear that impure water carried the poison or that pure water protected. Taking the whole book, the outcome seemed to Dr. Parkes to be this—that while Dr. Frank appears disposed to admit that there is a specific agency which is imported into a place, and allows that cases occur which look extremely like contagion, he yet sees so many anomalies and facts difficult to be explained that, after all his close watching of the Munich outbreak, he is evidently convinced that there is something in the method of spread which is yet unsolved, and on many points he is inclined to think that it is wisest not to express a confident opinion.

The second article in the Appendix consists of a Medical History of the Ashanti Campaign. It fell to the lot of Sir William Muir to have to pronounce an opinion to the then War Minister as to the practicability of the undertaking, and to make the necessary preliminary arrangements. Sir William evidently had the courage of his opinions, for, notwithstanding the fears generally entertained that a European force would perish in a futile attempt to reach Coomassie, he held, on the contrary, that under certain specified conditions, such an expedition might be undertaken with a good and reasonable prospect of success. The sanitary, medical, and invaliding arrangements for that campaign are very clearly set forth. The campaign was undertaken under exceptional circumstances in an exceptional climate, and some of the arrangements effected or contemplated in connexion with it may prove serviceable in future expeditions. Besides the materials for wooden huts, 30 of Whyngate's tents and 30 of the new pattern hospital marquee were forwarded. The weight of the latter is about 180 lb. packed in its valise, without poles and pins, and the whole, for easy transport, was packed in three parts. Among other things, 200 Mexican twine hammocks were forwarded, and a large supply of Esmarch's

first field dressing—somewhat modified as to details. There is a suggestion about the provision of portable food for the soldier in the field at pp. 216 *et seq.* of the Report, which strikes us as well worthy of being made the subject of some experimental trials during the autumn manœuvres, and there is a hint also relative to the employment of a solution of emetia by way of hypodermic injection in cases of tropical dysentery, as a substitute for the administration of ipecacuanha, which seems worth putting to the test. The medical history of the war is well told by Sir A. D. Home, up to the time of his having to relinquish his medical charge of the expedition from ill-health; and it is completed by Dr. Mackinnon's account of the march to and capture of Coomassie. There is a long and well-illustrated Report of the *Victor Emanuel*, and other papers bearing on the subject of the war, of little or no interest, however, to the general reader.

Dr. Gore's paper on the Outbreak of Enteric Fever at the Dublin Military Prison at the end of 1874 is well and carefully done—perhaps a little overdone. It was scarcely necessary, we think, to preface what should be a systematic practical investigation, by such an account of the origin and nature of typhoid as is given at the commencement of the paper in question. Mr. Nicholson's Medico-topographical account of the Station of Bangalore is very full, more especially in the matter of water analysis. Dr. Douglas contributes short but very interesting Notes on the Andaman Islands. Surgeon-Major Porter has several short papers on points connected with surgical practice at Netley; and Mr. Welch has an elaborate one on lesions of the heart and blood-vessels in the same volume.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

RUGBY.

THE school at Rugby was founded by Lawrence Sheriff in 1567, as a free grammar school chiefly for the use of the townspeople. Like many other establishments, it has developed from a mere local educational institution till it has attained a position in the first rank of our public schools. The general management of the school is conducted by twelve trustees and a governing body; the internal administration being carried on by the head master. The number of boys at the school in 1862 (the date of the visit of the Royal Commission) was 463; but, owing to the unhappy differences that took place shortly afterwards between the late head master and the trustees, the numbers sank. It is satisfactory, however, to record that a recovery has recently taken place; the numbers at the time of our visit reached 400, and we learn they are increasing each term. The boarders are received into the houses of masters; and the entire medical and sanitary supervision of the school and boarding-houses is entrusted to one medical officer, Dr. Clement Dukes; and a report of the sanitary condition of the school-buildings and of every house licensed to take boarders is made at least once a year, under the direction of the governing body.

The school is situate at the west or north-west extremity of the town; the masters' houses, though apart from the school premises, are near it, and are quite in the outskirts of the town, so that the school, with the exception of a small row of cottages and one or two detached residences, lies quite in the country. The school proper consists of the following buildings:—The head master's house, with accommodation for the "school-house" boarders, school-rooms, chapel, playground (thirteen acres in extent, with gymnastic ground and racket courts), swimming bath of cold spring water, closets and urinals, and the sanatorium. The school and the boarding-houses are connected with the town sewers: these are badly laid, and till lately unventilated; at the time of our visit a few ventilators had been added, and we were told that flushing chambers were to be put up. The very perceptible odour at many of the points where ventilators had been introduced showed that the pressure of sewer gas in the drains was considerable, and that the means of exit were not sufficient. Under such circumstances it would be specially necessary to prevent its access to the houses by strong and efficient traps placed between the house-drains and main sewers, and, for further security, to ventilate the house-drains themselves by means of a ventilating shaft. The water is supplied by the town water company and is derived from two sources—(1) from the river Avon, (2) water collected by underground drains from springs some distance to the west of the town. The quantity of water supplied daily amounts to 220,000 gallons. The quality of the water, as shown by different analysts, is good, nor is there reason at present to fear that it may be exposed to contamination at its source; unfortunately, however, the supply is intermittent, and this, with the defective condition of the town drainage, constitutes a source of some danger. The school authorities ought to require the water company to give a constant supply, and if that is not possible we think the school would act wisely if they secured a supply of their own. We have so often had occasion to point out the dangers attendant on an intermittent water-supply, especially in connexion with a previous system of drainage, that we need not dilate further on this point on the present occasion.

Each boy on entrance has to produce a certificate stating what infectious disease he has had, and giving information as to any peculiarity or delicacy of constitution, for the guidance of the medical officer of the school. A record is kept of all important cases of illness that occur in the school. If any infectious disease break out during the term a printed notice is sent to the parents when the boy goes home, telling them, if it is thought there is any possibility of his carrying the disease, how long to keep him separate from others, and when he may be considered safe. Dr. Dukes informs us that this makes the parents careful to send a similar notice on the boy's return. All infectious diseases are treated in the sanatorium; formerly all cases of severe illness were treated there, but we believe that recently it has been decided to limit its use to diseases of the zymotic class. The sanatorium is exceedingly well constructed, and, according to the suggestion of the late Dr. Bright, arranged in compartments, each compartment being in itself a separate hospital. This made the plan of bringing infectious and non-infectious cases under the same roof less objectionable than it would otherwise have been, and in the experience of many years they have never had a case of infectious disease spread from one compartment to another; still, the entire separation of infectious cases is, we are convinced, the safest policy to follow. After infectious illness the boy is sent to complete his convalescence to a farm-house in the neighbourhood, and he is not allowed to return home till it is considered perfectly safe for himself and others for him to do so—a piece of consideration to the public that might well be generally adopted. At Rugby the study and medium-sized dormitory system is more completely carried out than in any school we have yet visited. In our introductory remarks on the subject of the sanitary arrangements of schools (vide THE LANCET, vol. i. 1875, p. 860) we expressed an opinion that this system was more satisfactory than either that of large dormitories, or the combined arrangement of study and dormitory (for one or two boys only), as at Eton and Harrow. Our objections to large dormitories arose from the consideration that if scarlet fever were introduced into the school, a greater number of boys would be at first exposed to its influence, and also that greater difficulty would be experienced in isolating the members of a large dormitory, in which a case of fever had occurred, than in one of smaller size. Our objection to the Eton and Harrow system was made chiefly

on moral grounds, which need not on the present occasion be alluded to; we may, however, say that the introduction of cubicles in some of the dormitories at Rugby is to be regretted for similar reasons. In the "school-house" the average number of beds in each dormitory averaged about fourteen; in some of the rooms we thought that barely enough cubic space was allowed for the number of inmates; however, there was distinctly no overcrowding. We need not describe a Rugby study as it is found in the "school-house," since Tom Brown has made it familiar to everyone; we will only say it struck us the ventilation might be improved in some of the rooms, and this, we believe, was in contemplation. One row of studies, which bore evidence of having been hastily constructed, had been condemned, and a new row was to be erected in its place.

Leaving the "school-house," we visited Mr. Arnold's "house," the arrangements of which we cannot praise too highly. It is well worth a visit to see to what perfection the sanitary and domestic arrangements of a school-house can be brought. Dr. Dukes also commends highly the dormitories at Mr. Wilson's house; unfortunately we did not see them. The closets and urinals of the school are arranged in a separate building; this was free from smell, and all the arrangements were in good working order. At Mr. Arnold's house the closets and urinals, by a simple arrangement, are entered from the outside by day and from inside the house at night. The medical officer, Dr. Dukes, makes frequent visits to the school and boarding-houses, and immediately reports any sanitary deficiency to the masters, so that it is rectified at once.

The boys have two meat meals a day. Breakfast is a meat meal when the first lesson is at 7 A.M., but when breakfast precedes the first lesson—i.e., at 8 A.M.—then meat is supplied at tea; when there is early school, coffee and milk or milk is given beforehand. Dinner is at midday. No third meat meal is supplied to any boy without a written order from the school doctor stating it is necessary, but meat may, at the discretion of the house-master, be allowed to be sent in from the town one evening in the week. This permission, however, is not supposed to develop into a weekly institution. Parents are requested to aid the school authorities in restricting luxury and expenditure by sending little or nothing in the way of hampers—very wholesome advice, too little regarded, we fear, however, by the majority of parents. The hours of work average about thirty-six a week. This is by no means excessive, and allows plenty of time for recreation and physical training, which appear to be excellent. The boys are brought in frequent contact with the medical officer, and by this means any failure in health is at once detected. Special pains are taken in devising amusements for weak and delicate boys, who are unable or unfit to join in the ordinary school sports. The practical pursuit of botany, zoology, and geology is therefore encouraged, and with considerable success. The general health of the school is good, but Dr. Dukes thinks it would be better if there were not so many pastrycooks in the town! Dr. Dukes also thinks the health of the inmates depends a good deal on the fulness of the school. When the school is quite full there is great competition for the vacancies, but when the numbers fall there is no difficulty in being admitted, provided the entrance examination can be passed, and so many more delicate boys enter than would otherwise be the case, and this of course tells on the average health of the school.

In conclusion, we must state that the sanitary arrangements at Rugby are eminently satisfactory, and are an evidence of what can be effected when these details are entrusted to the management of an intelligent and responsible medical officer. No doubt there is room for improvement in minor respects, but the authorities seem fully alive to the necessity of carrying out all sanitary details, and rendering the school as perfect as possible, and many of these defects are rapidly being remedied. The point of danger which threatens most lies in the intermittent nature of the water-supply; this danger is certainly diminished by the fact of the school being placed at the outskirts of the town, and the water supplied to the school and boarding-houses cannot be exposed to much risk of contamination from leakage from sewers before its distribution to them; still the remote possibility of such a risk ought to determine the governing body to take steps to render any such contamination absolutely impossible. We have to thank the Rev. Dr. Jex Blake, the head master, for the time he gave and the trouble he took in showing us round the school premises, and for affording us every opportunity of making our inquiry. We must also express our obligations to Dr. Clement Dukes for the valuable information he supplied us with, not merely in reference to our inquiry at Rugby, but with respect to school sanitary management in general.

INTERNATIONAL MEDICAL CONGRESS, PHILADELPHIA.

THE Philadelphia International Medical Congress will be formally opened on September 4th, 1876, in the University of Pennsylvania. The programme published by the authority of the Committee of the Centennial Medical Commission, and bearing the signature of Dr. S. D. Gross, the President of the Commission, is a most promising one. Among the addresses which will be delivered before this Congress in general meeting we may enumerate the following:—Dr. Austin Flint, the Professor of Practice of Medicine in Bellevue Hospital Medical College, New York, will deliver the address on Medicine; Dr. Henry J. Bowditch, President of the State Board of Health of Massachusetts, that on Hygiene and Preventive Medicine; Dr. Paul F. Eve, Professor of Operative and Clinical Surgery in the University of Nashville, that on Surgery; and Dr. T. Parvin, Professor of Obstetrics in the College of Physicians and Surgeons of Indiana, will deliver the address on Obstetrics. We notice, also, that Dr. Hermann Lebert, Professor of Clinical Medicine in the University of Breslau, is to deliver an address.

Discussions on scientific subjects will be opened in the following sections:—Medicine, Biology, Surgery, Dermatology and Syphilography, Obstetrics, Ophthalmology, Otology, Sanitary Science, and Mental Disease. The questions that will be submitted are well calculated to be provocative of discussion from their debateable character, or the novel and fresh or interesting points involved in them. As illustrative of this we may take the first question—Typho-malarial Fever; is it a special type of fever? by Assistant-Surgeon Dr. Woodward, of the United States Army. The views entertained on this subject in this country would depend upon, or be materially modified by, the circumstance whether the study and experience of enteric fever had been derived from practice in this country or abroad—India and the Colonies, —where malarious fevers are rife, and where the conditions under which typhoid prevails are, at any rate, very different from those present in urban or rural populations in this country. The second question in connexion with the name of Dr. Lewis Smith, is one that has already excited discussion in our own columns—viz., as to the identity or not of diphtheritic and pseudo-membranous croup. The influence of conditions and mode of life in the development of nervous diseases, and that of high altitudes on the progress of phthisis, are also among the questions for discussion in this section. In biology the name of Austin Flint, jun., stands in connexion with the subject of the excretory function of the liver; and in the surgical section, antiseptic surgery, the medical and surgical treatment of aneurism, the treatment of coxalgia, and the causes and geographical distribution of calculous diseases, come up for discussion. In syphilography, the virus of venereal sores, its unity or duality, stands in connexion with the well-known name of Dr. Bumstead.

But we might occupy a large space in our columns if we enumerated all the more important subjects announced for discussion in the different sections. In order to facilitate debate the outlines of the opening remarks by the several reporters will be published about the 1st of June, and copies may be had on application to the corresponding secretaries. We give the names and addresses of these latter gentlemen for the benefit of those—and we hope there will be many—intending to be present at what promises to be a very important and most interesting medical congress. Dr. Richard J. Dunglison, 814 N., 16th Street, and Dr. R. M. Bertholet, 113 S., Broad-street, Philadelphia.

THE LANCET.

LONDON: SATURDAY, APRIL 15, 1876.

LAST week we announced that a Conjoint Scheme had been agreed to unanimously by the delegates of the English examining bodies. The parties concerned in this scheme are, of course, the College of Physicians, the College of Surgeons, the Society of Apothecaries, and the four universities—viz., Oxford, Cambridge, London, and Durham. The following table will show the way in which the important duty of appointing examiners is to be distributed amongst the English bodies:—

	Coll. Phys.	Coll. Surg.	Soc. Apoth.	Universities.
Anatomy and Physiology ...	4	4	0	2
Chemistry	1	0	3	2
Materia Medica, Medical Botany, Pharmacy	1	0	3	2
Medicine	3	0	3	4
Surgery	0	6	0	4
Midwifery	3	2	3	2
	12	12	12	16

It will be seen that there are 52 examiners, of whom 36 will be chosen by the corporations and 16 by the universities. The corporations will elect equal numbers; thus, the College of Physicians will elect 12, the College of Surgeons 12, the Society of Apothecaries 12. In the earlier scheme approved by the co-operating bodies, the total number of examiners was only 38—viz., 8 in Anatomy and Physiology, 4 in Chemistry, 4 in Materia Medica, Botany, and Pharmacy, 8 in Medicine, 8 in Surgery, and 6 in Midwifery. The addition of fourteen more examiners makes us the more disappointed that no provision is made for the appointment of special examiners in the important subjects of Forensic Medicine, State Medicine, and Therapeutics. The Apothecaries' Society may be congratulated on the powers which it is to enjoy under this scheme. It seems rather remarkable that under the new order of things which is to be represented in this scheme, the Apothecaries' Society is to appoint only four less examiners than all the four universities of England put together, and that it is to elect three examiners in Medicine and three in Chemistry. We have never been slow to admit the sensible character of the examinations of the Apothecaries' Society; but in projecting a Board which, if realised, will have a most important influence on medical education in England in the future, it does seem to us that too much power is given in the above scheme to the Apothecaries' Company in giving it the right to appoint three examiners in Chemistry, three in Medicine, and three in Midwifery. Chemistry, as it applies to physiology, disease, and medicine, is a subject of very great importance. It is one of the foundation stones of the science of medicine. And yet in this scheme, approved by the delegates, the Apothecaries' Society will have more say than the College of Physicians, or than the four Universities, and as much as the College and the Universities united will have. In regard to Medicine itself, it will appoint three out of ten examiners. It is not satisfactory to us to see the College of Surgeons unrecognised as regards the appointment of examiners in Medicine. It is not creditable to the College to be willing to be without the right of appointing an examiner in Medicine while the Apothecaries' Society appoints three. It might fairly have claimed the right to appoint one, seeing that it now no longer refuses to test the medical knowledge of candidates for its diploma. One of the most gratifying things about the scheme is that the Universities will have the nomination of four examiners in Medicine and four in Surgery.

We should think it still very doubtful whether the bodies themselves will accept this scheme. The Universities may perhaps agree to the larger influence of the Apothecaries' Society, but this is doubtful; and if they do, it will be from sheer hopelessness of reconciling the claims of the profession and of the public with the claims of bodies which have vested interests and traditional jealousies to be consulted. We cannot say that we are enamoured of a scheme which comprises fifty-two examiners, leaves out some of the most important subjects, and gives so large an influence to a body which cannot claim to represent modern medicine.

SIR GEORGE BURROWS retires from the Presidency of the College of Physicians after a long and honourable term of office. His successor, Dr. JAMES RISDON BENNETT, was elected on Monday evening, after two lively and exciting divisions. We heartily congratulate Dr. BENNETT on his election. He has earned the high honour by his career as a sound physician, and by his services to the College. In its councils he has always taken an active part, though we do not say one that we have always approved. He has ably represented the College in the General Medical Council, and he has been one of the most loyal and steadfast supporters of the project for a conjunction of the examining boards. He has been long connected with St. Thomas's Hospital, of which he is now consulting physician, and he is also physician to the City of London Hospital for Diseases of the Chest. He has made contributions of value to the literature of pathology, notably in his Treatise on Acute Hydrocephalus, which gained the Fothergillian gold medal; and in his Lumleian Lectures on Cancer of the Chest. Dr. BENNETT graduated in Edinburgh in 1833. It is not the least pleasant feature in Dr. BENNETT's election that it breaks through a tradition which practically gave the graduates of Oxford and Cambridge a monopoly of the chair of the College of Physicians. Under the broader relations of our existing universities and medical corporations, and with the wider diffusion of medical learning, such a monopoly was quite indefensible. And if the ambitious sister university in the south has the feeling—for which she may be excused—that one of the first-fruits of this triumph over exclusiveness should have been to place one of her graduates in the chair, she will have no difficulty in soon rejoicing that a graduate of the older and not less renowned University of Edinburgh has been elected.

We sincerely trust that Dr. BENNETT will justify the choice of the Fellows, and will ably represent and lead the College during his term of office. We are of the number of those who believe that the College of Physicians might do

much more both for the public and the profession than it has done. It has had too much of the immobility and deadly dignity of an old body, and has refused to identify or trouble itself much with the urgent questions of society and legislation on which it might have had great influence. Two years ago, on the suggestion of the late Dr. ANSTIE, it ventured to break its dignified silence, and sent a memorial to the Government as to the urgency of the physical conditions in which the working classes were living. This step was not taken without opposition, and we regret to say that amongst its opponents was the newly-elected President of the College. Whether the accomplished legislation and the praise of the Home Secretary has led Dr. BENNETT to change his mind as to the propriety of that opposition we do not know. We hope it has. There are other equally urgent questions on which the opinion of the College ought to be given, and would be sure to be respected. These are days when Colleges exist not for formal and ceremonious purposes, but for the promotion of science and learning, and of such legislation as shall raise the health and civilisation of the people. The election of Dr. BENNETT has very properly broken through an old tradition of the College, and it will be an unmitigated satisfaction to us to find that Dr. BENNETT will not feel it unworthy of his Presidency to seek to break through other traditions which favour the idleness and hinder the usefulness of the College.

MR. SIMON'S latest reports to the Privy Council and Local Government Board, Nos. 4, 5, and 6, of his New Series, have an altogether exceptional interest. No. 4, devoted to the administrative details of his department, so far as relates to England, indicates more fully than previous reports, the extent to which the accumulated sanitary experience brought to the aid of the Local Government Board, at the time of its formation, by its Medical Department has been set aside in the administration of the Board. There is something too preposterous almost for belief in the disproportion, as related by Mr. SIMON, between the measures of continuous supervision maintained by the Local Government Board in respect to the one measure vaccination for the one disease small-pox, and the measures which should come under its cognisance in respect to all other diseases. The vaccination arrangements of the Central Government, conceived and perfected under the Privy Council, are a marvel of successful administration; the sanitary arrangements of the Central Government, conceived and carried out under the Local Government Board, are a marvel of unsuccess. The one represents the intelligent application of existing knowledge to a particular end, the other represents the withdrawal of such knowledge, and the substitution for it of what is pleasantly termed "common sense," happily defined by Professor CAIRNES as "the crude guesses of unmethodised experience." The action of the Medical Department of the Local Government Board in the prevention of diseases other than small-pox was represented in 1874 (to which year the report refers) by 56 inspections in the 1558 sanitary districts over which the Board has supervision, and of this work Mr. SIMON simply expresses the opinion that it hardly represents "an exertion of the Board's influence in favour of sanitary progress in more than a small fraction of the cases where such progress is urgently wanted." The mere statement is, perhaps, the severest condemnation of the sanitary policy of the Board. Mr. STANSFELD and Mr. SCLATER-BOOTH have the unenviable distinction of sacrificing the medical elements of sanitary administration to Poor Law routine, and but for the individual energy of a few medical officers of health in certain sanitary districts, the whole sanitary administration of the Board must have ended in a hopeless deadlock—if, indeed, it has escaped such a consummation.

Mr. SIMON'S fifth report (new series) is devoted to the European relations of Asiatic cholera. This report includes a detailed report by Mr. NETTEN RADCLIFFE on the Diffusion of Cholera and its Prevalence in Europe during the ten years 1865–74, and an abstract by Dr. SEATON of the Proceedings of the International Sanitary Conference held at Vienna in 1874. Dr. SEATON was one of the representatives of the British Government at that Conference. Of Mr. RADCLIFFE'S report it is sufficient for the present to quote Mr. SIMON'S statement, that his study of the great diffusion of 1865–68 is perhaps the completest ever attempted in regard to so large a passage of epidemiology. Mr. SIMON, in a few pregnant sentences, discusses the practical bearings of Mr. RADCLIFFE'S report, and then, passing to questions closely connected with it, he touches upon the question of cholera in India. Here, in a few masterly words, he points out how impossible it is for European pathologists to entertain the opinion that the same property of contagiousness, and the same relations of this property to circumstances of filth which have been observed as essential conditions of the extension of the disease in Europe, do not exist in India. He adds: "If the opinion be less generally entertained in India, or in parts of India, than it is in Europe, probably the difference of opinion is in great part only an expression of the fact that it must be more and more difficult to prove the contagiousness of the disease in proportion as studies on this point are made in places where the disease may be autochthonic." Again, Mr. SIMON observes that, "so far as the European opinion holds good, the amount of cholera diffusion in India is likely to be controlled by the same preventive measures as are certainly effectual for the like purpose in Europe."

Mr. SIMON'S sixth report (new series) relates to the scientific investigations made under the direction of the Privy Council in 1874. This report contains Dr. BURDON-SANDERSON'S reports on the Process of Fever and on Infective Inflammations, Dr. KLEIN'S report on the Intimate Anatomical Changes in Enteric or Typhoid Fever, Dr. CREIGHTON'S further researches on the Etiology of Cancer, Dr. THUDICHUM'S further researches on Physiological Chemistry, and Dr. BAXTER'S report on an Experimental Study of certain Disinfectants. Dr. SANDERSON'S researches on Fever and Dr. BAXTER'S study of Disinfectants we have already noticed. In a prefatory note Mr. SIMON gathers up, and brings together bit by bit, the different clues of these invaluable researches, and we can see dimly the all-important issues to which they lead in the hands of the master-spirit which controls them. It is with dismay, then, that, as we begin to discern the goal, the rumour gains ground of Mr. SIMON'S resignation of his official post. Anything more dis-

astrous to practical and scientific hygiene at the present moment in this country we cannot well conceive. Dr. PARKES's loss to the public by death was an irreparable but uncontrollable misfortune; Mr. SIMON's resignation while in the fullest vigour of his unrivalled powers would be a loss to the public involving the gravest responsibility, and which can hardly go unquestioned.

WE observe with profound regret that no real progress in sanitary legislation is likely to be effected this session. The air we breathe and the water we drink are both to remain foul a little longer, and all we gain in exchange is a new title for our QUEEN, and that, too, a title which is desired by none, and strongly disliked by very many. The late Government were assailed for sensational legislation, and were accused, not altogether without reason, of neglecting vitally important social questions for the sake of carrying showy measures of doubtful wisdom and necessity. Put the Conservatives in power, was then the cry, and you will see all this remedied. Sound practical laws will be multiplied, unsound ones repealed, and, above all, sanitary reform will be held as the watchword of the party. Such a programme, if adhered to, would have gained the respect of all true lovers of their country, but hitherto it has proved little better than an electioneering cry. Little has been attempted, and still less accomplished, and now, when all obstacles to vigorous action seem to have been removed, we find the most important part of the session wasted on a measure which is useless and sensational beyond all precedent.

In writing thus we are fully aware that the long-expected Rivers' Pollution Bill is still promised for some time after Easter, and that the Government, pressed by the powerful appeals of the Duke of NORTHUMBERLAND and Lord WINMARLEIGH, have at length promised a Royal Commission to inquire into the noxious gases emitted by manufactories. But in neither respect is there ground for much rejoicing. A real Bill for preventing the pollution of water-courses could not be passed so late in the session, and the action of the Government in postponing their measure proves what we have all along feared, that we are merely to have a repetition of last year's sham, and not a sound measure of reform. There is not the slightest excuse for delay or imperfect action in the matter. Two successive Royal Commissions have worked on the subject for eight years, and have collected the most ample materials for legislation. Strong opposition to any real reform must of course be looked for. The inevitable "vested interests" would be sure to muster in force, but we believe from many inquiries that the opposition would be less than is expected, and that the manufacturers would be thankful to have the question definitively settled. But the Act, when it is passed, must be a thorough one. It must necessarily be somewhat complex, for many varieties of pollution have to be provided for and many interests considered. Rigid standards of purity must be established, accurate definitions framed, and all ambiguity of phrase avoided. Our manufacturers must not be crippled nor our people poisoned, and the Act, while providing for these two essential conditions, should be so drawn as to diminish as far as possible the necessity for litigation. The preparation of such a Bill would be no light task, and its discussion would involve long and anxious labour. Its introduction after Easter would be an absurdity, but the materials for it have long been ready, and we hold it a disgrace to our Government and a misfortune to our country that it was not laid before Parliament early in the present session.

The noxious gases question is still less hopeful. The grievance has been complained of for years. Deputation after deputation has dilated on it. Government inspectors have reported on it, and independent associations have been formed to deal with it. Two years ago it really seemed as if something would be done, and now at last, at the end of March, we receive, not a Bill, or even the promise of a Bill to stop the evil, but a tardy consent to the appointment of a Royal Commission. So that, judging from our experience in regard to water pollution, we may, in eight years' time, be favoured with a small, weak, and possibly "permissive" Bill for arresting air pollution.

Possibly, by the end of the century, we may even gain the right to breathe pure air and drink pure water.

A COMMUNICATION of MM. SAPPEY and DUVAL to the Académie des Sciences, "On the Course of the Tracts which connect the Brain and the Spinal Cord," adds considerably to our knowledge of an obscure part of the anatomy of the nervous system. Hitherto the elements of the cord have been distinguished no further than the medulla. The work of MM. SAPPEY and DUVAL is an attempt to trace them through the pons Varolii. The authors divide the antero-lateral columns of the cord into two parts—the antero-internal, between the anterior median fissure and the anterior horns, and the antero-lateral, between the anterior and posterior horns. The fibres of the first of these decussate throughout the greater part of the spinal cord, taking an important part in the formation of the anterior commissure. These columns in the medulla and pons are separated from the rest, and recede from the surface, so as to occupy, first, the central, and then the posterior part of the medulla; ascending through the pons, they reach the crura, and ultimately pass into the optic thalami. The decussation of the pyramids is formed exclusively by the lateral columns, which cross in successive layers, isolating the remains of the anterior horns—an arrangement which is now generally accepted. In forming the chief part of the anterior pyramids, they separate the antero-internal columns, which are ultimately situated immediately behind the prolongation upwards of the anterior pyramids. The posterior columns of the cord decussate in the medulla above the decussation of the anterior pyramids. They pass forwards, and break up into twelve or fifteen bundles, which cut off the posterior horn, pass through its deep extremity, and ultimately skirt the grey substance, which is situated in front of the central canal of the medulla, to pass to the opposite side. Thus they form a triangular raphe, the base of which is posterior. Soon this triangular raphe becomes elongated from before backwards, and separates the antero-internal columns, so as to become contiguous to the motor part of the pyramids, and form their deep (or sensitive) layer. The posterior columns thus preserve, in the medulla, the same relation to the

lateral columns which they occupied in the cord. In the pons the two become separated by a layer of grey substance; the sensitive part becomes considerably modified, and becomes more and more external. It occupies the outer part of the cerebral peduncles, and enters the optic thalami with the antero-internal columns.

Annotations.

"Ne quid nimis."

HOW TYPHOID FEVER IS SPREAD.

DR. FRANKLAND, in a recent address to the Fellows of the Chemical Society on the Organic Impurities of Drinking-water, adduced, as a striking instance of the persistency of the typhoid poison when diffused in water, the outbreak of a violent epidemic of typhoid fever in a Swiss village through the use of spring water which, after contamination with the poison, had filtered through nearly a mile of porous earth, but had nevertheless lost none of its virulent properties. The occurrence in question is one of the most remarkable, if not the most remarkable, on record, and the circumstances in connexion with it have been exhaustively investigated by Dr. A. Hägler, of Basel. The facts have been set forth by the late Professor Parkes in the last volume of the Army Medical Bluebook, and briefly by Professor Frankland in a communication to *Nature*.

In the village of Lausen (on the railway from Basel to Olter) epidemic enteric fever had never occurred in the memory of man, and the neighbourhood was also free. The ground consists of marl and lime, and is tolerably water-holding. Certain well-water was only used by the inhabitants of six houses, while the other inhabitants (780, in 90 houses) used the water from a public spring which arises at the foot of a hill, the "Stockholden." This water is received into a reservoir, and then led, by wooden pipes, into four stone tanks. On 7th August, 1871, ten inhabitants were attacked, and, in nine days more, fifty-seven persons were sick with typhoid fever. These cases spread over the whole village using the spring water, but the inhabitants of all the houses which had wells of their own were entirely spared. To the end of October, 130 persons were attacked, besides several children; and, towards the end of the epidemic, two persons were attacked who lived in the houses which did not have the water from the common spring. The proof that the "spring-wasser" had distributed the "infectious matter" was based on the following:—Stockholden is a hill 300 feet high; its westerly spur extends into a little side valley. Through this little valley runs the Furler streamlet, which beyond the village of Lausen ends in the "Ergolz." In the Furler valley were some scattered farm-houses. In one of these farm-houses, in June and July, two persons were attacked with typhoid, and later on two others. The latrines of these houses were all in direct connexion with the brook, but this opens into the Ergolz *below* Lausen. After accurate inquiry it was found, however, that the Furler brook communicated directly with the spring descending from the Stockholden. It was known to the inhabitants of Lausen that when the meadows in the Furler valley were watered, the spring increased in amount; besides, about ten years ago, 100 paces below the infected houses in Furler valley, the upper-earth strata had fallen in, and formed a large opening, into which some of the water of the Furler brook flowed without again reappearing. After the hay harvest in July the meadows were water-manured, and the spring in Lausen shortly afterwards obtained a turbid and bad-tasting water. The ground was geologically explored, and when the above-named spring was dug up, salt water was poured into the Furler brook and made the spring in Lausen quite briny. As Professor Frankland puts it in his communication to *Nature*, the passage of water from the irrigated meadows to the spring at Lausen was proved by dissolving in it, at the meadows, eighteen hundred-weight of common salt, and then observing the rapid increase of chlorine in the spring water; but the most important and interesting experiment consisted in mixing uniformly with the water fifty hundred-weight of flour, not a trace of which made its way to the spring; showing that the water was filtered through the intervening earth, and did not pass by an underground channel. The conclusion is obvious—viz., the risk which attends the use, for dietetic purposes, of water to which even so-called purified sewage gains access, although, as in the case of Lausen, such water may be used with impunity until the moment when the sewage becomes impregnated with typhoid poison.

MORPHIA DISEASE.

THE vast abuse of narcotics in modern society is becoming a serious evil. There is no denying the fact that in countries where no administrative control of chemist-shops exists, as in England and America, the public has too easy access to such drugs. The report of the Medical Officer to the Privy Council on the use of laudanum in the industrial districts of England for the purpose of keeping infants quiet startled its readers some years ago. It is not long since a political weekly contemporary boldly contended that chloral was to be found in the workboxes and baskets of nearly every lady in the West-end "to calm her nerves." Chloral-punch had become an "institution" in the drinking-saloons of New York scarcely a year after its introduction into medical practice. Now we hear from sober, orderly, and paternally ruled Germany that there is such a thing as morphia disease spreading amongst its population. The easy application of subcutaneous injections left to the patients themselves or their attendants by indulgent practitioners has proved so tempting to persons afflicted with bodily or mental pain that they have taken to habitually practising them, and, of course, as in the case of the continued and uncontrolled internal use of opium, alcohol, or chloral, the effect soon becoming weaker, the dose has been increased, and, in some cases related by the physician of the private maison de santé at Berlin in the *Klin. Wochenschrift*, reached the amount of from 12 to 16 grains per diem. The symptoms seemed to be very much like those of opium-eating. One lady took to morphia injections, after she had become acquainted with their effect in an attack of gall-stone colic, during the French war, when the anxiety about her male relations in the field weighed too heavily on her mind to stand the mental stress. After she had practised the soothing operation four years, her face showed a greyish-leaden hue, the pupils became the size of a pin's head, and her monthly periods had ceased, though she was only thirty-three years old and married. Violent shiverings after the type of tertian fever, hyperæsthesia and neuralgia, dislike for meat diet, great weakness, inability to pursue any continued occupation, existed, with unimpaired intellect and memory, in the well-educated and clever patient. She was cured in the space of four weeks by gradual deprivation of the drug. Her catamenia returned in ten days. If patients subject to this kind of disease become aware of their state they are apt to change it into alcoholism. The wife of a medical man who saw in a book on Materia Medica that alcohol was considered an antidote for morphia became a confirmed drunkard. The author observed four similar cases. In two other cases the

patients committed suicide, and two died from marasmus. These last four had refused medical treatment.

The task of the physician seems to be always a very difficult one, as it is impossible to wean these persons from their habit unless they are treated like prisoners, searched before admission to the hospital or sick-room, put under the guard of attendants inaccessible to bribery, and cut off from all communication with the outer world before the critical time has passed. The most highly educated and otherwise respectable will tell any amount of lies and perjure themselves to procure the accustomed poison. Like dipsomania and opium-eating, the morphia disease degrades the moral character. Twelve hours after the stoppage of the morphia injections a severe collapse generally ensues, and it is advisable to keep the patient for a week in bed. Wine and ammonia may be given, the latter injected, but alcoholic stimulants are, for the reason stated, to be used sparingly. Wild excitement and depression follow in alternation. The tepid bath, with or without cold affusion, a mild generous diet, and an occasional dose of chloral will be useful. Generally, after some days, diarrhœa of a critical character sets in and lasts from a week to a fortnight, without requiring any remedy but two or three warm water enemata during the day. Uncontrollable vomiting may necessitate nutrition by means of an enema. If no diarrhœa makes its appearance, and the usual behaviour and cheerfulness of the patient remain unaltered, the physician can be sure that he has been able to partake of morphia in secret. Experience seems to make it advisable to deprive people suffering from this disease at once and entirely of the drug. Their wilfulness and liability to relapses are, however, so great that only about 25 per cent. have been seen to recover in a large series of cases. The moral treatment, by urging them early to some kind of steady work, is particularly to be insisted upon.

DEATH OF MR. CAMPBELL DE MORGAN, F.R.S.

WE little thought when, two weeks ago, we drew attention to the excellent bust of Campbell De Morgan, executed by his friend John Graham Lough, and presented by him to the Middlesex Hospital, that in so short a time we should have to point out that that fine work of art was indeed none other than a memorial of him whose features it so well portrays. With very great sorrow do we record the death of one whose departure from amongst us has been so swift and sudden. Full of years and honours, yet sharing to the last in those duties which it has been his delight to follow during a long professional career; honoured and respected by all who knew him, venerated with no common veneration by a multitude of our profession who were proud to claim him as their teacher, he is mourned to-day by as large a circle of friends as any man could have. We must leave to another occasion to speak more fully of his long career—a career striking in its simplicity and honesty of purpose. There is one melancholy fact in the history of his last and fatal illness. It is this: His friend Mr. Lough had just completed his task and superintended the erection of his tribute of affection and gratitude, when he was taken ill with bronchitis. Mr. De Morgan was unremitting in his attention, and watched throughout the night of the 6th instant by the bedside of his dying friend. The next day he was himself struck down by the attack of pleuro-pneumonia which has hurried him to the grave. Mr. Lough died on the Saturday, the day after Mr. De Morgan's seizure. Few can doubt that in this last act of friendly devotion Campbell De Morgan sacrificed his own life. "Greater love hath no man than this."

We are indebted to the courtesy of a hospital colleague for the following account of Mr. De Morgan's last illness. His friends had observed with anxiety for some time past, numerous indications of failing health, but Mr. De Morgan, who was in his sixty-fifth year at the time of his death, had apparently much improved in health during the past few weeks. After sitting up on the night of Thursday, the 6th inst., with his friend, he returned home to breakfast, and afterwards visited a patient out of doors. Whilst prescribing for a lady in his own house early in the forenoon, he was seized with very severe and prolonged rigors, accompanied by intense stabbing pain in the left mammary region. He at once sent for his colleague, Dr. Greenhow, and in his absence Dr. Henry Thompson was summoned. Both these gentlemen attended unremittingly throughout his illness. The temperature rose rapidly to 104°, and the pulse to 90; and in the course of a few hours there was evidence of consolidation of the greater part of the left lung, especially of the apex, accompanied by other signs of pneumonic hepatisation; and marked pleuritic friction was audible over the whole of the left chest. He continued to suffer from intense pain in the original seat, pain which was only relieved by repeated doses of chloral and morphia. The pulse soon became somewhat irregular, and free stimulation was had recourse to. Early on Monday moist crepitation was audible over the whole of the left lung, increasing rapidly throughout the day, when also evidence of œdema of the lower lobe of the right lung showed itself. From the very first he was struck down by the severity of the attack, and he died early on the morning of Wednesday the 12th, after but five days' illness. We are informed that the funeral will take place at Kensal-green, next Tuesday, at 12 o'clock.

SIZE OF THE ULTIMATE ATOMS OF MATTER.

IN a recent remarkable address delivered before the Royal Microscopical Society by Mr. Sorby, an attempt is made to determine the size of the ultimate atoms of matter. Experiments recently made by Dr. Royston-Pigott, a well-known microscopist, satisfied him that the smallest visual angle we could distinctly appreciate was a hole one inch and a quarter in diameter at a distance of 1100 yards, which corresponds to about 6" of arc. This visual arc in a microscope magnifying 1000 linear would correspond to about the three-millionth part of an inch; on various grounds, however, Mr. Sorby is inclined to think that a size between $\frac{1}{2500000}$ and $\frac{1}{1000000}$ of an inch is about the limit of the visibility of minute objects, even with the best microscopes. He then proceeds to consider the relation this magnitude bears to the size of the ultimate atoms of organic and inorganic matter, and shows in the first instance that the mean of the calculations made by Stoney, Thomson, and Clerk-Maxwell gives 21770 as the number of atoms of any permanent gas that would lie end to end in the space of $\frac{1}{10000}$ of an inch in length. The cube of this mean is about 10,317,000,000,000, which represents the number of atoms in a space of $\frac{1}{10000}$ of an inch cube, that is in $\frac{1}{1000000000000}$ of a cubic inch. But if the gas containing this number of atoms consisted of two volumes of hydrogen to one of oxygen, when combined to form vapour of water, there would be a condensation of volume from three to two, and on condensing to liquid a further contraction to $\frac{1}{17}$ of the bulk of the vapour. Each molecule of water would, however, consist of three atoms of gas, and hence the number of molecules of liquid water in $\frac{1}{10000}$ of an inch cube would amount to about 3,972,000,000,000,000. A similar train of reasoning applied to albumen in the form of horn leads to the result that in a cube of $\frac{1}{10000}$ of an inch there are about 71,000,000,000,000 molecules. According to these principles there would be in the length of $\frac{1}{25000}$ of an inch (the smallest visible object), about 2000 molecules of

water or 520 of albumen, and therefore, in order to see the ultimate constitution of organic bodies it would be necessary to use a magnifying power of from 500 to 2000 times greater than those we now possess. These, however, would be of no use unless the waves of light were some $\frac{1}{1000}$ part of the length they are, and our eyes and instruments correspondingly perfect. As matters now stand we are about as far from a knowledge of the ultimate structure of organic bodies as we should be of the contents of a newspaper seen with the naked eye at a distance of a third of a mile, under which circumstances the letters of various sizes would correspond to the smaller and larger ultimate molecules. This being the case, the particles of organic matter may differ in an almost infinite number of structural characters, just as any number of different newspapers in various languages or with varying contents would look alike at a distance of a third of a mile. The bearing of these calculations, as Mr. Sorby shows, is important on the physical aspect of Darwin's doctrine of pangenesis, and he thinks they are, upon the whole, favourable to that theory.

THE LATE DR. PARKES.

A FEW of the former colleagues of Dr. Parkes at University College met, on Monday evening last, at the house of Mr. Erichsen, to consider the desirability of establishing some permanent tribute to the memory of Dr. Parkes in connexion with the College. The meeting was attended by Dr. Sharpey, Dr. Reynolds, Dr. Graily Hewitt, Dr. Ringer, Dr. Corfield, Mr. Christopher Heath, and others. Sir William Jenner, Professor Marshall, Dr. Burdon-Sanderson, and Dr. Wilson Fox were prevented by unavoidable circumstances from being present. After some discussion the following resolutions were unanimously agreed to:—1. "That this meeting is of opinion that it is desirable to establish at University College, London, a permanent memorial of Dr. Parkes." 2. "That such memorial should be of a character to aid scientific investigation and practical study in the subjects to which Dr. Parkes's work has been especially directed." 3. "That subscriptions be invited to a fund for the establishment of such a memorial, to which Mr. Erichsen be treasurer, and Dr. Gowers and Dr. Poore honorary secretaries."

THE POROSITY OF SOME BUILDING MATERIALS.

IN a memoir devoted to this subject in the *Zeitschrift für Biologie* (Band xi., Heft 3), which has attained considerable importance since the publication of Pettenkofer's classical lectures on Ventilation, C. Lang gives the results of a large series of experiments he has performed on the different kinds of stone, brick, &c., usually devoted to building purposes. The points he elucidates are the permeability of building materials in the dry and in the moist state, the permeability of the dry materials for coal gas, the recovery of their permeability after being moistened if a constant current of air be transmitted through them, and, lastly, their power of taking up water. It is impossible to follow Lang's statements into particulars, but amongst the more important results at which he arrived are:—1. That the amount of air traversing a porous substance is directly proportionate to a constant dependent on the nature of the material directly proportionate to the difference of pressure on the two sides of the septum, and inversely proportionate to the thickness of the septum. 2. He gives a long list of substances, arranged in order of their permeability, commencing with tufaceous limestone, which is most permeable, through bricks, Portland cement, to glazed clinkers, which are least permeable. 3. He finds that all kinds of coatings, as limewash, distemper, &c., materially impair the permeability of the porous materials, oil almost entirely abolishing it. 4. Wetting such substances impairs their porosity. 5. Porous substances give off the water they have taken up with a rapidity proportionate to the size of their pores. Clinkers were found to be absolutely water-tight, and hence Lang recommends them as being peculiarly appropriate for the formation of drains.

THE DIAGNOSIS OF HYDROPHOBIA.

THE fallacies attending a diagnosis of hydrophobia are strikingly illustrated by a case which occurred a few days ago at Leamington. An inquest was held on the body of a woman, aged forty-six, who was popularly supposed to have died in consequence of hydrophobia caused by the bite of a cat. A month after receiving the bite a convulsive attack ushered in a period of restlessness and nervousness, during which the bite was evidently foremost in her mind. These symptoms lasted ten days, and suggested to the medical men in attendance the probability, and to the friends of the deceased the certainty, of hydrophobia. Its distinctive symptoms, however, were absent, and on the eleventh day an attack of epileptiform convulsion occurred, followed by hemiplegia, coma, and death. A certificate of apoplexy and hemiplegia was properly given, but the popular supposition of hydrophobia led to an inquest. This was adjourned in order that a post-mortem examination might be made, which showed meningeal hæmorrhage and granular contracted kidneys, conditions amply sufficient to account for the whole of the symptoms. The case itself is instructive. Bites from dogs and cats are very common; cerebral diseases leading to general symptoms are not very rare. The concurrence of the two incidents generally leads to the inference that the bite is the cause of the symptoms, and when, in addition, a state of nervousness and rabiophobia is present, the symptoms are rendered complex, and the diagnosis is a matter of some difficulty.

THE PROPOSED UNITED SANITARY DISTRICTS IN WALES.

WE learn from the *Wrexham Advertiser* that the sanitary authorities in that neighbourhood having generally expressed opinions unfavourable to Mr. Doyle's scheme of combination, the Local Government Board has deferred the consideration of the question for the present year. In other words, as our contemporary expresses it, "Mr. Doyle's scheme is effectually bowled over." Even the authorities that at first assented to the scheme, it would appear, have now voted against it. Our contemporary observes:—"The officers intended to be appointed to the districts under this clause would not, in our opinion, secure the sanitary supervision expected, and on this ground we are supported by high medical authority. The Local Government Board would secure much better supervision by appointing efficient sanitary inspectors on a similar basis to those under the new Poor Law, who would see that the sanitary laws were properly and effectively worked. The appointment to such an office of men acquainted with sanitary science and sanitary law, under the control of the Board above, and responsible to and paid by that Board, would go far to secure efficient administration of the law, the application of the most efficient means for that purpose, and the general collection of facts and statistics bearing upon the important question of the general public health. Any way we are glad Mr. Doyle's scheme is knocked on the head, and the Wrexham rural sanitary authority is entitled to the credit of having turned the tide against it, and that successfully."

TOWNS AND THEIR SUBURBS.

AN important representative conference of the local sanitary authorities of Birmingham and the surrounding districts was held in Birmingham on the 31st ult., under the presidency of Mr. Joseph Chamberlain, the Mayor, to consider the expediency of forming a combined sanitary or drainage district, under the provisions of the Public Health Act, 1875. A resolution in favour of forming such a district, "for the purpose of carrying into effect a system of intercepting the outfall of the sewage, and of disposing of such for the use of such districts and contributory places," was carried, and a joint committee formed to memorialise the Local Government Board on the subject, and generally to further the formation of the proposed united district. The places which, for the above-mentioned purpose, it is proposed to unite with Birmingham, constitute what may be called an outer ring to that borough, and had in 1871 a population of about 162,000 persons, which has now probably increased to 175,000. The population of the district to be united may be estimated to the middle of this year at about 547,000 persons. The project from a sanitary point of view is full of promise, and is worthy of imitation by other large towns whose population has very considerably outgrown the old limits of the boroughs. It remains to be seen what support the sanitary reformers in Birmingham will receive from the Local Government authorities.

THE HARVEIAN ORATION.

BY the lamented death of Dr. Parkes a vacancy has occurred in the distinguished and honourable office of Harveian orator at the College of Physicians. It was thought likely Dr. Parkes might have left behind him the materials which he had intended should be woven into the oration that he, in the natural course of events, would have shortly given. This turns out to be the case. Sir George Burrows mentioned to the College on Monday that he had that morning heard from Sir William Jenner that amongst Dr. Parkes's papers existed the outline and much detail of his projected oration; and Sir William Jenner, we are glad to learn, has expressed his willingness to undertake to arrange these materials, and to read them to the College on the day already appointed for the oration.

AT a recent meeting of the Leeds Board of Guardians, the increase of lunacy and the necessity for further asylum accommodation were discussed. The union, it was stated, had 286 lunatics in the West Riding Asylum at Wakefield; 74 in their own workhouse, and 6 in the Sheffield Asylum. It was further added that the numbers were increasing year by year. The number of lunatics belonging to the borough of Leeds is said to exceed 500, and as there is a probability that further asylum accommodation will shortly be required for the West Riding, it was decided to suggest to the county magistrates that it might be provided in close proximity to Leeds.

THERE is an evident determination on the part of Government to improve the quality of our soldiers. Army surgeons in future, when examining the "raw material," will have to take cognisance of something besides physical soundness. The following Army Circular has just been issued:—"A considerable number of soldiers having recently been discharged from the army on account of medical disability, after serving only a short time, the attention of medical officers is directed to the necessity for their exercising great caution in the examination of recruits both as to their physical condition and their mental capacity."

THE *British and Foreign Medico-Chirurgical Review* for the present quarter seems to be one of the best that has appeared for some time, as far as variety, analysis, and criticism are concerned. The first article is a review of "Jaccoud's Clinique Médicale," the second is on "Localisation of Nerve Disorders," the next on "Nurses and Nursing," and these are followed by papers on "Recent Researches on Inflammation and Suppuration," on "The Vienna International Sanitary Congress of 1874," on "Pulmonary Consumption in the Army," with reviews of works on Diseases of the Heart, Diabetes, Carter on Eye Diseases, Holmes's Treatise on Surgery, and some valuable original communications, with the usual chronicle of Medical Science (foreign and contemporary).

AT a meeting of the National Association for the Promotion of Social Science, held on Monday evening in Adam-street, Adelphi, a paper by Mr. Baldwin Latham, C.E., was read, the title of which was as follows:—"Are Subterranean Sources of Water-supply the Cause of Enteric Fever?" The author dealt specially with the outbreaks of typhoid in Croydon, and urged that they were due to infiltration of impure surface and subsoil water into the water-supply, rather than to other causes, such as sewage pollution, defective drainage, &c. After the reading of the paper, a discussion took place, in which Dr. Alfred Carpenter, Dr. Hardwicke, Mr. A. Scott, and others took part. We hope to deal with Mr. Latham's views at greater length on another occasion.

A SCOTCH newspaper states that the University Court of St. Andrews has authorised their Professor of Medicine, Dr. Bell Pettigrew, to practise medicine and surgery, with the exception of the obstetric branch of the profession. Our contemporary congratulates the inhabitants of St. Andrews and the county of Fife "upon now having it within their power to avail themselves of the skill of one who has gained a prominent place as a physiologist, and whose long connexion with the Infirmary of Edinburgh furnishes the best guarantee that he will bring a ripe practical experience to the aid of a theoretical knowledge of the highest order."

THE Birmingham and Midland Association of Medical Officers of Health held a meeting last week under the presidency of Dr. Hill. Dr. Hickinbotham introduced a smoke-consuming apparatus for manufactories, and explained its principle and mode of working. Mr. Love, medical officer of health for Wolverhampton, read a paper "On Diseased Meat as an Article of Diet." This is an important subject and deserves more attention than is generally devoted to it by sanitary officers. Dr. Fenton then read a paper on the application of the watercloset system at Coventry, and which will be the subject of a debate at the next meeting.

ON the return of Professor Lister from Germany last summer he was elected an honorary member of the medical societies of Munich and Leipzig. The admission into the latter body is noteworthy from the fact that until now the place of an honorary member representing British surgery had remained vacant since the death of Sir William Lawrence. We congratulate Professor Lister on this fresh evidence of the estimation in which he is held on the Continent.

DR. WILSON, lecturer on ophthalmic surgery to the Royal College of Surgeons, Dublin, was last week elected a Member of Council to the College, in the room of the late Professor Morgan.

THE apathy of the average public in sanitary matters, and the difficulties that medical officers of health have to contend with, are well exemplified in Dr. Taaffe's Annual Report on the Health of Brighton in 1875. In this town, whose very existence almost depends on its health, we are told that 7430, out of 18,087 houses, stables, &c., are still unconnected with the main drainage system. Further, that in half of 6000 houses inspected during the year, the closets had no regular or proper water-supply. It is well for the prosperity of Brighton that its sanitary authority and medical officer of health persist in disturbing this apathy.

AT Lincoln, on March 24th, the members of the Lincoln Medical Society entertained at dinner Mr. F. D. Walsh, one of their senior members, on the occasion of his retirement from the Lincoln Lunatic Hospital, where he had held the office of medical superintendent for nearly thirty years. At the same time his medical friends presented him with a handsome present in token of their esteem.

DR. E. F. FUSSELL, in a report of the sanitary condition of the various unions comprehended in the East Sussex sanitary combination during the year 1875, shows that the death-rate in the period was only 14·9 per thousand. The union of Cuckfield, embracing fifteen parishes besides several large hamlets, appears to have been exceptionally healthy.

WE are requested by Dr. B. St. John Roosa to announce that the International Congress of Ophthalmology will commence in New York on the 12th September next. Further information may be obtained on application to Dr. R. H. Derby or Dr. Greening, New York.

THE borough of St. Helens, it was reported at a recent meeting of the Town Council, is suffering from a somewhat severe epidemic of measles. It was decided to warn the managers of schools to use all possible care to prevent the spread of the infection.

WE regret to learn that Sir William Wilde, of Dublin, well-known as an aural and ophthalmic surgeon and antiquarian, has been seriously unwell, but hopes are now entertained that he will recover from an illness which has been of a very grave character.

IT is rumoured that the new warrant for the Army Medical Department may very shortly be expected to see the light. We had imagined, after what Mr. G. Hardy had said, that it would have done so before this.

MR. HORACE NUTT, M.R.C.S.E., has been appointed coroner for the Sherborne Liberty, including the Hundred of Tetminster and Sherborne, in the county of Dorset.

DR. ALFRED WILTSHIRE has been appointed Lettsomian Lecturer to the Medical Society for the ensuing year.

THE ROYAL COLLEGE OF PHYSICIANS.

A MEETING of the Fellows was held on Monday afternoon, at which important business was transacted, particularly the election of a new President. This comitia meeting was a very large one indeed; no less than 110 Fellows were present. After some preliminary matters had been disposed of, the following resolution was adopted:—"No Fellow, Member, Extra-Licentiate or Licentiate of the College, is authorised or entitled, by virtue of any diploma or licence granted by the College, to assume the title of Doctor, or to append to his name the title of Doctor of Medicine, or the initial letters M.D. or any other letters indicating that he is a graduate in medicine of a university, unless he has obtained a degree in medicine from a university recognised by the College and legally entitled to confer such degree."

Sir William Gull then proposed, "That in all official communications between the College and its Fellows, Members, Extra-Licentiates, and Licentiates, the titles employed be in accordance with the registered qualifications of the persons addressed. (Vide Schedule A, Med. Act, 19 and 20 Vict., cap. 90.)" After some little discussion, it was proposed to postpone the consideration of the question till a future meeting. This was negatived by 53 against 45, and Sir Wm. Gull's motion was then carried by 58 against 26.

It was announced that a modified scheme for a Conjoint Examining Board for England, agreed to by the "Committee of Delegates," had been sent to the College, and would be laid before it at a future meeting.

Sir George Burrows, Bart., then delivered an address, which was devoted to a *résumé* of the proceedings of the College during the last year. The chief novel points of interest related to the Conjoint Scheme, and the office of President of the College. Sir George expressed his opinion that unless a board were formed in each division of the kingdom, great injury might be done to the metropolitan schools in many ways. He also stated his conviction that it was conducive to the welfare of the College that the tenure of office of its President should be at least three, and not more (in fairness to the claims of the distinguished Fellows fitted to fill the highest post in the College) than five years. Sir George concluded with a warm acknowledgment of the assistance he had always received from the officials of the College, and the kindness extended to him by the Fellows. He thanked them for the distinguished honour they had done him in placing him in the chair so many consecutive years.

The College passed a special resolution, to be entered on the proceedings of the College, in record of the services of the retiring President.

The College then proceeded to elect a new President, and the choice finally fell upon Dr. Risdon Bennett. In the first instance, the votes were given as follows:—40 for Dr. Bennett, 36 for Dr. Pitman, 21 for Sir William Gull, 10 for Sir William Jenner—who, however, had intimated his inability to accept office now,—and one each for Drs. Barker, Johnson, and Quain. At the second ballot there were 55 votes given to Dr. Bennett, and 52 to Dr. Pitman.

DIGITALIS POISONING.

IT is probable that Dr. Conrad Köhnhorn,* Oberstabsarzt, is the only physician to whose lot it has fallen to observe a case in which death was slowly induced by digitalis-eating, without the intercurrence of any diseased condition whatever, and the details, therefore, cannot fail to be of the utmost interest in both a physiological and medico-legal point of view.

A recruit, aged twenty-two, on the fourth day after his enrolment, reported himself sick, and was, on the 18th December, 1874, taken into the garrison hospital. His complaints corresponded to the symptoms of catarrh of the stomach and bowels—viz., complete loss of appetite, nausea, heartburn, occasional vomiting, constipation, great tenderness over the stomach, headache, and dizziness. Of the objective symptoms the most striking was his miserable appearance, while, at the same time, the thickly coated tongue and very fetid breath corroborated his somewhat exaggerated expressions of pain on palpation of the epigastrium; other objective signs there were none. Fever was entirely absent, the temperature never exceeding 98·6°,

* Deutsche Militairärztliche Zeitschrift.

and the pulse beating at only 56 per minute. Treatment afforded no relief, and three days later the pulse had fallen to 52. On the 23rd December vomiting occurred, and again returned on the 26th, consisting, on this occasion, of a green, slimy mass.

About the end of December came a communication from the district commandant of the locality whence this young soldier had been drawn, that he and another recruit were possessed of means for artificially producing sickness to escape military service; but as such accusations often emanated from malicious persons, no great heed was paid to it, while at the same time it remained still inexplicable why a young man recently in full health, and now with such apparently trifling symptoms, should resist all efforts, medical and dietetic, for his recovery.

In the meantime his bodily strength failed, and his aspect became yet more sickly and pitiable, so that on Jan. 1st the following note was made:—"Skin pale and ashy-grey and parchment-like, lips, conjunctiva, and gums anæmic, tongue moist with greyish-white coating, breath very fetid, no disturbance of motor power, sensorium free, pupils equal and reacting naturally. Temperature 97·8°; pulse 52.

For the most part the symptoms remained stationary, only the headache and giddiness seeming to increase; noises in the ears and dimness of vision were added thereto, and later hiccough occurred.

On Jan. 9th there seemed to be some swelling in the throat, and he complained of pain and difficulty of swallowing; as he stood up for examination, and approached the window, he fell in a faint, which, after a sprinkling of cold water, passed off. At one o'clock on this day, wanting to go to the closet, he was helped by an attendant to dress and assisted to stand up; scarcely had he risen from the bed than he sank back, became convulsed, and in a few minutes died.

His sudden and unaccountable decease heightened the already existing suspicion, and gave occasion for a judicial investigation. At the post-mortem examination no cause of death could be discovered; all organs were perfectly healthy, and there were but a few particulars in which there was the slightest deviation from the normal condition. "The blood was nowhere coagulated, but fluid and dark cherry-red; the right side of the heart was full, while the left contained no blood. The brain was very anæmic, presenting fewer puncta cruenta than usual, and the sinuses were comparatively empty. The mucous membrane of the stomach and duodenum presented some isolated spots of congestion, upon which the capillaries had ruptured and ecchymoses formed."

Among the clothes of the deceased was found, in a stocking, a little bottle containing thirteen pills. At the inquiry it came out that he had, long before enlistment, stated that he knew how to free himself from military service, and at a more recent date had admitted to a confidential friend, who remarked on his sickly appearance, that he was using means to be and to appear ill. Besides this, the other recruit, who lay under a like suspicion, now made a full confession that he had for some time taken the same pills with the same intent, but that, hearing of his comrade's death, he became frightened and threw the rest away. Although never under treatment, his symptoms were found to correspond exactly, only in a less degree—viz., loss of appetite, loathing of rich food, nausea and vomiting, constipation of three or four days' duration, tinnitus aurium and vertigo; after eight days' use of the pills his vision was so affected that at fifty paces he could not have recognised his best friend, "on account of the thick cloud before his eyes."

The intent now being laid bare, it remained only to discover the means, and both the symptoms and the post-mortem appearances pointed to digitalis as the poison; this the microscopic, chemical, and physiological tests subsequently corroborated, establishing the presence of the suspected substance both in the discovered pills and in the contents of the stomach and bowels.

So rare is the opportunity of observing an instance of digitalis poisoning disassociated from a diseased state, that Dr. Köhnhorn carefully reviews the symptoms, and bases upon them a division of the effects of this poison into a twofold action, the local and physiological. That the former is irritant the isolated congestions of the mucous membrane of the stomach and bowels with ecchymoses leave, he maintains, but little doubt; and notwithstanding that the most recent work by Rabateau, 1875, denies such an influence to the drug, yet the proofs by others that digitalis and digitaline inflame the subcutaneous tissues, irritate excoriations and wounds, cause redness of the conjunctivæ, with dilatation of the pupils and disturbance of vision, and excite the Schneiderian membrane to sneezing, tend to support this view.

To this local irritation the following symptoms may be referred:—The stomach and bowel catarrh, the coated tongue, foul breath, loss of appetite, heartburn, nausea, vomiting, constipation, and tenderness of the epigastrium.

The second recruit confessed that by the use of two pills four times a day anorexia and nausea were produced on the second day, and vomiting on the third.

The physiological action of digitalis consists in its effect on the heart, in that it prolongs the heart-stroke and *lessens the force* of the heart's contraction, and these results are brought about by its influence on the co-ordinating and musculo-motor nerves of this viscus.

Thus can be explained all the remaining symptoms. By the prolongation and weakening of the heart's action the balance of the circulation is soon disturbed (the parts most distant from the centre feel it most); the law of gravity gains an excessive power over the blood distribution, and hence the anæmic brain, with its train of inseparable consequences, the headache, vertigo, noises in the ears, dimness of vision, faintness, amounting to actual syncope on assuming the erect position, with, finally, the sudden death when the nerve paralysis became complete.

Of the narcotic influence assigned to digitalis there has been no evidence whatever in these cases, and this ascribed effect has either originated in error or been confounded with the languidness of syncope.

As to the amount of digitalis consumed by the two recruits, it can be approximated with tolerable accuracy; each pill weighed on an average 0·2 grammes and contained about 0·12 grammes (more than one and a half grains) of powdered digitalis, so that the deceased took in between four and five weeks 246 grains, and the survivor, at intervals, about 138 grains. In the effect upon the former exists strong evidence of the cumulative action of the medicine, and the admission of the latter that the use of two pills (a fraction over three grains of digitalis) four times a day gave rise to vomiting after the twentieth had been taken, establishes a symptom which is alike useful in guiding the administration or detecting the abuse of this substance.

This unique case of the fatal effect of digitalis is all the more interesting at a time when the value of this medicine, as a heart tonic, is so much under discussion, more especially as the observation of it has led Dr. Köhnhorn to believe that by the use of digitalis the heart's contraction is prolonged but *its force lessened*; whereas observers in this country are of opinion that it renders the ventricular contractions more *powerful and complete*, and the periods of rest between the contractions longer.

THE GULSTONIAN LECTURES AT THE ROYAL COLLEGE OF PHYSICIANS.

AT the commencement of his second lecture, Dr. Shepherd said that he had given reasons why he should prefer to restrict the term tubercle to the secondary infective disease. He referred to the opinion of Addison, that pneumonia leaves behind it indurations which are quite independent of tubercle, but play a large part in the phthisical process. Following a subdivision propounded a few years ago by Dr. Peacock, the lecturer said that he would classify phthisis into three groups:—1. Intra-alveolar, where destruction is due to accumulation of dead or dying products within the alveoli. This was Buhl's "desquamative pneumonic phthisis." 2. Phthisis due to changes in the vessels and bronchi; a form produced by long-standing bronchitis and emphysema. 3. So-called fibroid phthisis, where there is large increase of interstitial tissue. This form is due to alcoholism, syphilis, anthracosis, &c. All these forms fall under Morton's defi-

nition of the disease; all owe their origin to primary disease of the lung; all lead to general wasting of the body. Tuberculosis may supervene upon the first and second varieties. Passing rapidly in review the clinical symptoms of the disease, Dr. Shepherd passed on to consider the descriptions afforded by older writers of the post-mortem appearances, illustrating his remarks by drawings from Carswell, Colberg, Thaon, &c. All these representations of so-called "tubercle" were, he alleged, due to catarrhal products, and he would compare an inflamed pulmonary lobule to an inflamed sebaceous follicle. Skoda held that every pneumonia of the apex of the lung was tubercular, and he himself had had cases of general capillary bronchitis with localised dulness at one apex. Rindfleisch, in his recent article, places the original seat of tubercle granulation at the point of transition of the bronchi into the alveoli. So called "phthisis ab hæmoptoe," of which he had seen examples, were undoubtedly instances in which the phthisical process originated in intra-alveolar changes. Dr. Shepherd referred also to two cases, in one of which the father was suffering from chronic phthisis, while the son was dying rapidly of a more acute form of the disease. The granulation was frequently nothing more than a vesicular lobular pneumonia, which might or might not be associated with perivascular growth. Turning then to that form of phthisis which is essentially extra-alveolar—viz., fibroid phthisis, Dr. Shepherd stated his belief that in most cases there was a history of spirit-drinking; in others of syphilis. He thought the syphilitic form could be clinically recognised, being marked by cough and dyspnœa, with the physical signs of chronic phthisis without diarrhœa. There was generally good nutrition. The lung, in addition to the fibroid induration, or interstitial pneumonia of some authors, was usually emphysematous. In no part does it present anything like miliary tubercle. He mentioned cases referred to by Moxon, Sturges, and others, in some of which hæmoptysis was a prominent symptom. The lecturer concluded by referring to miner's phthisis, in which an interstitial fibroid overgrowth, probably dependent on changes in the lymphatics, was produced by the inhalation of foreign particles.

In the third lecture Dr. Shepherd pointed out that heridity in phthisis was but little more than a tendency to catarrh (the *dispositio catarrhalis* of Morton). He pointed out also how the age at which the disease showed itself was frequently inherited, and then passed on to analyse a few of the earlier symptoms of the affection. Of these, hæmoptysis, cough, dyspnœa, and pain in the chest were the most frequent. He believed that hæmoptysis, so often absent, was really beneficial between the ages of twenty and twenty-five, being due to hyperæmia of the bronchial mucous membrane and alveolar capillaries. But generally, before hæmoptysis occurs, there has been some mischief already set up. Analysing a large number of cases which had occurred at the Victoria Park Hospital, with regard to the period at which hæmoptysis first appeared, he had found by far the largest number of cases fall between the ages of eighteen and twenty-five years. With regard to the lung to be first affected, he mentioned that whereas Laennec held this to be the right, Louis was of the opposite opinion. His own observations led him to much the same conclusion as that arrived at by Dr. Hughes in 1842—viz, that the difference between the two sides was too trifling to be of any importance. He gave a few statistics culled from the Victoria Park Hospital records, tending to show the greater prevalence of the disease among males and the influence of in-door and out-door work. He had compiled other tables, which he would not then produce. The result of all was to show that Broussais, the upholder of the inflammatory origin of phthisis, was right in holding out a possibility of a cure, while the advocate of the pure tubercular hypothesis, Laennec, was wrong in regarding it as absolutely incurable. Devoting a few words to the question of treatment, in which he urged the frequent examination of the excreta in order to check the too indiscriminate and wasteful use of cod-liver oil, he condemned the practice of prescribing this drug without regard to the individual case. Much more did his remarks apply to the pancreatic emulsion so largely composed of fat. The lecturer concluded by a summary embracing the points travelled over, and insisting upon the great advantages to be derived from hygienic measures in the treatment of the disease.

Correspondence.

"Audi alteram partem."

ON PUNCTURE OF THE TESTIS IN ACUTE ORCHITIS.

To the Editor of THE LANCET.

SIR,—In my remarks on "Acute Orchitis" I was careful to allude to Mr. Henry Smith's operative measure as one of "puncture," "paracentesis," "perforation," "the introduction of the narrow-bladed knife into the parenchyma of the testis;" but I find that in one passage the phrase "undivided testicle" accidentally insinuated itself. After Mr. Smith's distinct and repeated repudiation of the propriety of the application of such descriptive terms as "incision of the testis," "division of the testicle," "splitting up the testicle," &c., it would be neither candid nor courteous to employ them any more; but in justice to Mr. Holmes and others, including myself, who were at first impressed with the apparent severity of the procedure, and the boldness and freedom with which the bistoury seemed to be handled, I would call Mr. Henry Smith's attention to the following passages from his writings on the subject. In his paper in THE LANCET in August, 1864, Mr. Smith, relating his first case, says:—"With a view of evacuating the pus, I took a bistoury and made a *free and deep* incision into the supposed abscess," the result being that "the tubes of the testicle shot out from the wound, forming a protrusion the size of a nut." The favourable termination of this case led Mr. Smith to adopt the treatment by puncture, and he tells us that "in the next case of acute orchitis which presented I made a *deep and free* incision with a sharp narrow bistoury, emitting about half a teaspoonful of serum and several drachms of blood." I have italicised the epithets *deep and free*, because, in his letter in THE LANCET last week, Mr. Henry Smith explains that he merely intended to convey the idea that he "carried the narrow knife freely into the substance of the testis as regards depth, not as to length or breadth of the incision," and I think he will at once admit that they really convey more than he desired. Moreover, in his paper in THE LANCET of the 8th of January, Mr. Smith observes that the sudden relief from acute pain is due to the circumstance that the unyielding tunica albuginea is *freely incised*. Who would gather from this that the procedure simply consisted in the introduction of a blade a sixth of an inch in breadth into the testis and its withdrawal without enlarging the opening, either upwards or downwards? The idea derivable from Mr. Smith's language, that a free incision was made through the tunica albuginea, doubtless tended to prejudice the treatment by *puncture*, and if Mr. Holmes had not inveighed *more suo* against "splitting up" the testicle, the innocent character of the method would not have been established. But just in proportion as Mr. Smith limits the solution of continuity in the tunica albuginea and narrows his knife, in the same proportion does he render it less likely that the relief is due to cutting that tunic, and more probable that there is no necessity for interfering with the tunic at all. Admitting, as I do most cheerfully, that Mr. Smith often removes pain and shortens the duration of orchitis, admitting that the treatment deserves more consideration than it has received from surgical authorities, I maintain that he has failed to show that any advantage has accrued in his cases from puncturing the *testis*. Let him narrow his blade still further and use a cataract needle, and let him in the next hundred cases avoid wounding the testicle, and puncture in one or two places the tunica vaginalis only, and then let him tell us whether the results are equal or not to his present mode of procedure. If sufficient relief does not result from evacuation of the fluid in the tunica vaginalis I will become one of his disciples, but until he has overthrown our existing pathology and given a more complete demonstration of the value of interfering with the gland itself, I must follow him afar off, with Mr. Spencer Watson and Mr. Fergusson McGill.

I am, Sir, yours &c.,

Finsbury-square, April 3rd, 1876. WALTER RIVINGTON.

TREATMENT OF ACUTE RHEUMATISM BY SALICIN.

To the Editor of THE LANCET.

SIR,—Dr. Broadbent's very interesting cases of rheumatic fever treated by salicylic acid, published in your last number, confirm the observations of Riess and Stricker as to the value of that acid in the treatment of that disease.

But Dr. Broadbent scarcely does me justice when he refers to my communication (published in the numbers of your journal for March 4th and 11th) as if I had simply followed the practice and confirmed the results of the German physicians. A reference to my paper will show (a) that the remedy regarding whose action I wrote was not salicylic acid, but salicin; (b) that I had been using this remedy in rheumatic fever since November, 1874, more than a year before Riess and Stricker reported favourably of salicylic acid; and (c) that I had been using it for some time before the introduction of salicylic acid into this country.

The results which I obtained from the use of salicin were so remarkable that I hesitated to publish them till a sufficient number of cases lent certainty to them. Since their publication I have had sent to me from various quarters such increased evidence of the efficacy of the remedy, that I have come to regard it almost as a specific in the treatment of acute rheumatism. Its advantages over salicylic acid are (1) that it is not apt to be impure, (2) that it acts in smaller quantity, (3) that it is more agreeable to take, and (4) that it never gives rise to unpleasant effects.

I believe that there is a great scarcity of salicin in the market at present. Until it is manufactured in larger quantity, salicylic acid will be found a good substitute. Those who try both remedies will not fail to find salicin the better of the two.

Your obedient servant,

Dundee, April 10th, 1876. T. MACLAGAN.

ROME.

(From our own Correspondent.)

THE EUCALYPTUS IN THE CAMPAGNA.

To make the New World the auxiliary of the Old was a vision of Canning's which is now being realised in the action of the Australian eucalyptus on the Roman Campagna. The Trappist monastery of the Tre Fontane—on the spot where Saint Paul is believed to have been beheaded—has for some years been under the enlightened direction of the Padre Gildas, who, aided by the Fra Orsise, has set himself to prove how far the Agro Romano in which their institution lies is susceptible of amelioration by planting in general and the culture of the eucalyptus in particular. Desolate indeed is the locality in which they have taken up their abode, and so visited by malaria in the summer and autumn as to have hitherto been uninhabitable by all all who have not made themselves fever-proof. Their very labour in upturning the long inert soil and disengaging the "telluric poison" in which many physicians find the true cause of malaria, aggravates the dangers incident to the spot, till the heroic stand they have made amid disease and death itself reminds us of the Roman centurion left with his handful of men in defence of the Wall of Hadrian. They are at length, however, reaping the reward of their truly exemplary industry, and by the assiduous cultivation of the eucalyptus, and the skill with which they have extracted its virtues in the form of an elixir, they have not only kept fever at bay, but have found an antidote for it, more certain than quinine, when it has been accidentally imported among them. Apart from its antiquarian and ecclesiastical interest, the monastery of Tre Fontane has now become a place of pilgrimage for the stranger in Rome, solving, as it bids fair to do, the problem of the improvement of the Campagna, and offering, as it does, a gratifying illustration of what courage and industry, aided by science, can achieve.

On my last visit to the spot, the Padre Gildas expressed a wish that THE LANCET might keep the English public from time to time informed of the work now progressing under his auspices, and accordingly he drew up a series of notes on the same, of which I make a selection. The plantation of eucalyptus, which is gradually covering the grounds of the monastery, has, of itself, improved the atmospheric condition of the spot, in so much that the brotherhood enjoy an immunity from malaria, almost entire, throughout the hottest months of the year. The agricultural operations, however, in which they are engaged for the reclamation of the surrounding country, subject them to a distinct source of danger—the "intoxication tellurique," to which all tillers of long inert soil are liable,—and consequently they have sought, in an extract from the eucalyptus leaves, a more active and immediate antidote. This extract has been prepared single-handed by the Fra Orsise, and its virtues are much more potent and certain than any other preparation hitherto made from the same source. As specimens of its action the following examples may be taken.

At the beginning of March, a strong wind setting from the Pomptine Marshes laid up a few of the brotherhood with malarious fever. One, the chief gardener, who persevered at his work even under the incipient malady, finally experienced a sharp attack of it, and took a dose (about half a drachm) of the elixir. Feeling better, he resumed his labours, but had again to desist, from a second and severer accession of the fever. A larger dose was then given him, after which the fever did indeed return in a very mild form, but a third dose cured him, and he has been in his usual good health since the 10th of last month.

On the 10th the Fra Orsise himself, from imprudent over-exertion, contracted the fever and took a mild dose of his elixir. He still suffered, however, on the 11th, and on the 12th had a rather severe attack, which lasted from 9 A.M. till 5 P.M. He took an extra strong dose (about half an ounce) of the elixir, and since then has been perfectly free from the malady.

The Padre Gildas on the 13th had a distinct access of the fever, lasting from 9 A.M. till 4 P.M.; on the 15th another and severer attack from 7 A.M. till evening; and on the 17th a third from 5 A.M. till nightfall. In the interval of the first two attacks he tried the elixir, but without success. After the third he took quinine in the usual doses, but it seemed to aggravate the fever with head symptoms. He resumed the elixir in a stronger dose than previously, and after two days the fever had completely gone, leaving him in his wonted health and with good appetite.

Other cases, duly noted in the Padre's register, showed that in Rome itself the fever is quite tractable by the use of the elixir—in so much that the monastery is now being largely resorted to for supplies of it. All this, be it remembered, has been achieved by the unprofessional agency of the brotherhood themselves, who declare it to be their earnest wish that medical science should fairly examine the remedy and report impartially on its properties. Should such a verdict prove favourable, the worthy Trappists of the Tre Fontane will have done more than their brethren of the Grand Chartreuse—invent a stimulant liqueur. They will have associated their name with a remedy quite as effective in its way as Jesuit's bark.

THE ROMAN ACADEMY OF MEDICINE.

Professor Carlo Maggiorani presided at a numerous attendance of the Roman Academy of Medicine on the 26th ult., when several interesting communications were read. One by Professor Moriggia, entitled "Certain Chemico-organic Experiments on some New Properties of the Bile," demonstrated—1st. That the acid bile precipitates alkaloids and glucosides, and redissolves them if added in slight excess. Professor Moriggia here asks whether the bile so prepared might not reasonably be regarded as an antidote for the poisonous alkaloids and glucosides? Whether it is not capable of assisting the other antidotes more or less efficacious by its property of arresting the process of digestion of the gastric juice? 2nd. That the bile precipitates all the albuminoids or their derivatives in acid solution; nay, that it is better supplied with this property than the already known precipitants, while, under given conditions, it redissolves the precipitate if added in slight excess. 3rd. That the mucus of the bile is in great measure digestible by the gastric juice. 4th. That the bile slightly acid has a strongly marked antiseptic property. 5th. That the bile does not manifest any antidigestive action on the saliva. An animated discussion ensued on these positions, generally favourable to Professor Moriggia's

reasoning; after which Professor Manassei read a paper on the "Leprosy of the Greeks." A patient suffering from this malady was introduced, and the diagnosis proved that the fatty degeneration proper to this form of leprosy had nothing in common with the caseous degeneration of the syphilitic form.

Rome, April 1st.

Obituary.

WILLIAM SANDS COX, F.R.S.

FEW provincial surgeons during their day enjoyed a higher reputation, or occupied a position of greater usefulness, than the subject of this memoir. Mr. Sands Cox founded the Birmingham School of Medicine, and had the ambition to make that school a Midland university. To it he devoted the best years of his life, giving not only time but money to further its interests, and sacrificing his private practice to what he deemed a high and worthy professional object. That his aim was not achieved was, perhaps, due to some failing of his own, rather than to any want of co-operation or sympathy on the part of the medical profession of Birmingham, but still the name of Sands Cox will long remain remembered as that of a skilful surgeon, an active philanthropist, and an earnest promoter of medical education.

Mr. Cox was born in Birmingham in 1802, and had, therefore, reached his seventy-fifth year. His father was an able practitioner, and was for many years surgeon to the town dispensary. He gave his son an excellent education, first at the General Hospital, Birmingham, and then at St. Thomas's Hospital, London, where he was intimate with Mr. Edward Grainger, at that time the eminent teacher of anatomy at Webb-street school, and afterwards at Paris. Mr. Cox was made M.R.C.S. in 1824, and at once settled in Birmingham, where he became surgeon to the General Dispensary. In 1828, with the assistance of the late Drs. Johnston and Booth, he founded the school of medicine which afterwards was, in 1843, constituted by Royal charter, Queen's College.

The Queen's Hospital was founded in 1841 mainly through Mr. Cox's exertions, and to it for twenty years he gave a large amount of valuable time.

On his retirement from the office of Dean of the Faculty of Queen's College, a public testimonial was presented to him in recognition of his public services, and on his resignation of the office of surgeon to the Queen's Hospital he was appointed consulting surgeon, and a life governor of the charity. He was a magistrate and deputy-lieutenant of Warwickshire, and a member of many learned societies.

A translation of "Maingault on Operations," a memoir "On Amputation of the Hip-joint," and the editing of some surgical clinical reports, are the chief of his literary productions.

He was interred at Aston Church, his body being, at his request, carried to the grave by six of the oldest students of Queen's College, and the funeral being as plain and unostentatious as possible.

By his will, his medical library, surgical instruments, microscope, &c., together with £3000, he bequeaths to the Cottage Hospital at Moreton-in-the-Marsh. £12,000 is to be devoted to the erection and endowment of the dispensaries at Balsall Heath, Aston, and Hockley, suburbs of Birmingham; £3000 to the building and endowment of a dispensary at Tamworth, and a like sum for a similar purpose at Kenilworth, where he died. He also founds a scholarship at King Edward's Grammar School, Birmingham, and another at Guy's Hospital, London.

Besides these donations to medical institutions, he bequeaths money to endow a church in Birmingham, which he had built, and leaves the residue of his estate, after paying all legacies and after the death of his widow, to be divided between the Moreton Cottage Hospital, and the several dispensaries mentioned in his will.

That he has not left anything to the Queen's College or Hospital must be a matter of surprise as well as regret, because they were the objects of his earliest labours, and the field in which his energy and benevolence were for the best years of his life most actively engaged. Whatever differences he might have had with others as to the management of those institutions, it was generally expected that he would not have forgotten them in the distribution of his property among various charities, and that he would have included the Queen's College and Hospital among the recipients of his bounty, not only on account of their intrinsic merits, but also because it is through those institutions that his name will chiefly be remembered in the future in connexion with Birmingham.

WILLIAM ARBUCKLE, M.D.,

INSPECTOR-GENERAL OF HOSPITALS.

DR. ARBUCKLE commenced his service in India in 1836, and retired in 1864. After the usual period of general duty, he was for several years civil surgeon at Dharwar, a favourite station in the Southern Mahratta country, and there mutual and enduring friendships were formed with men then at the outset of their careers, but who afterwards rose to positions of distinction in the Civil Service of India.

From Dharwar Dr. Arbuckle was transferred to the charge of the Lunatic Asylum of Bombay, and his official reports evince the thoughtful care which he brought to bear on this important subject of State policy. He advocated the expediency of district asylums, urging that cases of insanity occurring in the Southern Mahratta country or in Sind should not be sent to Bombay, where their language was neither spoken nor understood, because it only tended to aggravate their maladies. He further believed that with asylums within reach at the first onset of the disease, when treatment is so efficacious, the villages would be relieved from many victims of chronic insanity who are never brought under the influence of medical treatment until they have committed some criminal offence and are consigned to an asylum for the rest of their lives.

After a time Dr. Arbuckle became the civil surgeon of Bombay, and found in high place in the civil offices of the Presidency several of his old Dharwar associates. During the last years of his service he was Government Examiner of Grant Medical College, and maintained successfully the high test standards which his distinguished predecessor, Dr. M'Lennan, had originally established.

Before his final retirement Dr. Arbuckle was for a short time on furlough, and when in England was promoted to the rank of Deputy-Inspector-General of Hospitals. He, however, did not return to India to assume the administrative duties to which he had been appointed, and which he was well fitted to discharge. He retired to the scenes of his birth and of his early days, on which, in the long years of foreign service, his mind had loved to dwell. He fixed his residence at Balmar, near Kirkcudbright, and became a centre of genial and kindly hospitalities, and gave the advantage of his experience, his sound practical judgment, and liberality to all purposes of local interest and importance. Nor did he forget the friends of his public life, for he frequently appeared amongst them in the old, well-remembered form of cheerful friendliness and kindly interest. He was fond of field sports, and had health and strength to enjoy them till October last, when it was first noticed that his powers of endurance had sensibly failed. Towards the end of the year indications of gastric and hepatic fever began to appear. He went to Edinburgh for advice. The disorder increased, and symptoms of organic change of the liver became evident. He at once realised his position, returned to the home of his choice, and calmly awaited the close of his useful life. He died on the 15th of February, in the sixty-seventh year of his age, leaving behind him the memory of much goodness and sterling worth to be cherished by a large circle of mourning relatives and friends.

R. L. SHEFFIELD, F.R.C.S. EDIN.

WE regret to have to inform our readers of another loss the profession has sustained by the death of the above-named gentleman, who commenced his professional studies at the London Hospital in the year 1864, and early gave promise of distinguishing himself as a hard-working, pains-

taking pupil. In due course, he successfully passed his examination at the Royal College of Surgeons in 1867. He was appointed house-surgeon at the above-named hospital in May, 1868, and at the expiration of his term of office was re-appointed for an additional period of three months, during the whole time discharging the duties with zeal and ability, and to the satisfaction of the House Committee. He was then appointed clinical assistant, which appointment he retained until December, 1869. In February, 1870, he was appointed one of the honorary surgeons at the Metropolitan Free Hospital, where, by his unremitting attention and devotion to the interests of the institution, he won the esteem and confidence of the entire staff, as well as of the committee of management, by whom his death is most sincerely deplored, whilst unvarying skill and kindness in the treatment of the numerous patients committed to his care secured for him their lasting gratitude. In January, 1875, he was almost unanimously elected assistant-surgeon to the City Orthopædic Hospital, which appointment, as well as that to the Metropolitan Free Hospital, he held up to the time of his decease, which took place on the 3rd ult.

SAMUEL GILES, M.D., B.A. LOND.

THE death of Dr. Giles, who practised at Newcross, Deptford, for several years, and died 14th March last, at Margate, at the early age of forty-three, has removed from us a general practitioner of no common attainments or qualifications, which, had he been spared, would have raised him to no ordinary position in the profession. Dr. Giles acquired his early education at University College, London, passing therefrom to the University of London, where he took his B.A. His medical studies he pursued at Guy's, where he soon became known as a painstaking and diligent observer; graduating as an M.B. with distinction, and taking his M.D. in 1859. Subsequently he settled in general practice, and apart from family aid or other accessories, made for himself a very respectable and satisfactory position; above all, winning the esteem and confidence of those about him. Dr. Giles has left a widow but no children.

HENRY JAMES ELLERY, M.D., M.R.C.S., &c.

ON Friday, the 24th ult., Dr. Ellery died at Axminster, at the comparatively early age of forty-six, after an illness of only twenty hours. He had visited his patients on Thursday morning, was cheerful and genial as usual, and apparently in his ordinary health, though he had been complaining of slight indigestion for a day or two previously. About 3 P.M., whilst partaking of some beef-tea, he was seized with violent pain in the bowels, which, despite the able and energetic assistance rendered him by Mr. Appleton and Mr. Cotterell, two retired medical men resident in Axminster, and subsequently by Dr. Shapter of Exeter, scarcely abated till the time of his death at 1 P.M. on Friday. The cause of death was peritonitis, following perforation of the bowel.

Dr. Ellery enjoyed a high reputation in Axminster and the neighbourhood as a sound and able practitioner. He gave to every case his undivided attention, sparing neither time nor trouble when the occasion demanded it. He was esteemed and beloved alike by patients and friends, and his untimely death has cast a profound gloom over the entire district.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

THE EAGLEY EPIDEMIC.

Mr. SCLATER-BOOTH, in reply to Mr. J. Cross, said it was not true that the Local Government Board had refused to hold an inquiry into the circumstances of this outbreak. On the contrary, he himself had informed the hon. member for Bolton that he was perfectly ready and willing to institute such an inquiry. The reason why there had been some delay was because the local medical officer had instituted an inquiry on behalf of the local authorities. But as he (Mr. Booth) had within the last few days received a communication from the sanitary authority asking for a government inquiry, he had resolved to dispatch a government inspector immediately after Easter in order to carry out such an inquiry.

RATING OF ST. THOMAS'S HOSPITAL.

Mr. SCLATER-BOOTH, in reply to Sir J. Scourfield, said his attention had not been called in an official manner to the recent case of the rating of St. Thomas's Hospital based on the amount altogether expended thereon, but he was generally aware of what had taken place from the newspapers. The cost of building was of course not a proper criterion of value for any purposes. The Valuation Bill contained the existing law, which based rating on gross rental or annual value, and not the capital expended in construction. He could not undertake to introduce a clause which would be contradictory to that principle.

CONGRESS OF HYGIENE.

The CHANCELLOR of the EXCHEQUER, in reply to Mr. R. Yorke, said the Government were not at all insensible to the advantages likely to result to the public from the International Exhibition and Congress of Hygiene to be held at Brussels, but having regard to all the circumstances of the case they did not feel themselves in a position to propose any vote on the subject.

MEDICAL RELIEF GRANTS.

The CHANCELLOR of the EXCHEQUER informed Mr. M'Laren that it was impossible to treat the question of medical relief grants for Poor-law purposes in Scotland by itself, but he hoped it would be dealt with in connexion with the bill about to be introduced by the Lord Advocate for the further amendment of the laws relating to the relief of the poor in Scotland.

THAMES VALLEY DRAINAGE.

Replying to Captain Bedford Pim, who asked a question on behalf of Mr. Grantham,

Mr. SCLATER-BOOTH said the report of Colonel Ponsonby Cox on the draining of towns and villages in the Thames Valley was of so interesting and important a character that he proposed, contrary to the usual rule, to lay it on the table.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology, at meetings of the Board of Examiners on the 6th and 10th inst.:—

S. S. Burt, C. A. D. Clark, G. Coates, D. A. Coles, A. Dingley, R. Gill, C. J. Ogle, M. Prickett, G. H. Sylvester, H. C. Wright, and A. Jackson, St. Bartholomew's Hospital; T. Capell, Westminster Hospital; R. E. Clitheroe, King's College; S. A. Crick, T. D. Gimlette, L. Maybury, S. J. Taylor, W. D. Tennant, and W. F. Hadaus, St. Thomas's Hospital; H. H. Dummere, J. F. Hay, F. Wadham, St. George's Hospital; T. Floyd, J. T. Fox, and A. J. R. Oxley, London Hospital; J. G. S. Lewis, H. O. Stuart, Guy's Hospital; A. E. May, St. Mary's Hospital; J. E. Neale, D. J. Williams, A. Hinde, K. R. Smith, J. R. A. Clarke, and D. F. Dymott, University College; A. J. Newman, R. M. Webster, and T. P. Pearse, Middlesex Hospital; C. R. Smith, Cambridge and Bartholomew's Hospital; F. C. A. Treadgold and M. M. Williams, Manchester; A. D. Leahy and W. W. Webb, Charing-cross Hospital; W. W. Groome, Cambridge and St. Thomas's Hospital; and P. Robinson, Leeds.

Of the 159 candidates examined during the last and present week, 30 failed to satisfy the Board of Examiners, and were referred for three months' further anatomical and physiological study.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on April 6th:—

Bradford, Cordley, Ashted House, Birmingham.
Cuthbert, Wm. Wood, Mendlesham, Suffolk.
Davey, Wm. Thomas, Leyton, Essex.
Gay, Chas. Wm. Ebenezer, St. Alban's.
Gibson, Henry Christopher M., Ilchester, Somerset.
Hamp, John Walton, Wolverhampton.
Hyne, Frederick Alexander, South-square, Gray's-inn.
Perkins, Edward Benjamin Steele, Exeter.
Strover, Walter, St. Helen's, Jersey.
Webb, William Henry, Claremont-square, Pentonville.
Whittle, Ewing Mould Glynn, Liverpool.

The following gentlemen passed the Primary Professional Examination on the same day:—

Edward Cureton, Queen's College, Birmingham; Frederick Walton William Goodsell, St. Bartholomew's Hospital; David Arthur Hughes, St. Bartholomew's Hospital; John Hincks Vinrace, Queen's College, Birmingham.

DURING the quarter ending March 31st, upwards of twenty-eight tons of diseased meat and unsound food were confiscated in Dublin; and since a systematic inspection of meat, &c., has been established, some six years ago, no less than 2,250,000 lb. of unsound meat have been destroyed.

AT a meeting held in Birmingham on the 4th inst. it was decided to form an Association of Inspectors of Nuisances for the Midland Counties, and Mr. Woolley, the chief inspector for Birmingham, was elected president for the year. The assistance of efficient inspectors of nuisances is essential to the usefulness of the medical officer of health, and if the Society be made the means of promoting sanitary knowledge and exchanging experience between inspectors of nuisances, it will materially further the cause of public health.

ANOTHER death from the inhalation of chloroform is reported in the local papers as having occurred at Leicester. The particulars given are very meagre: that the patient was a builder, aged fifty-three years, and that, according to the evidence given at the inquest by Mr. Hodges, house-surgeon of the Leicester Infirmary, the deceased was thoroughly examined as to the condition of his heart, &c. Mr. Hodges further stated that this case was the first instance of misadventure in chloroform administration in his experience of some 4000 cases.

THE Slough Local Board, as well as so many other sanitary authorities, urban and rural, are in considerable difficulty as to the disposal of their sewage. As a means of solving the problem, they have selected a piece of land near Datchet-lane for the purpose of their sewage disposal. As it happens that this spot is within about four hundred yards of Eton College playground, it would be interesting to know whether the site has any special advantages for the purpose which may partially excuse the Local Board for making such a remarkable selection. Sewage works pretty generally meet with local opposition, and opposition to the Slough scheme is not only excusable, but desirable.

VACCINATION GRANTS.—The following gentlemen have received awards from the Local Government Board for successful vaccination in their respective districts:—Dr. Davies, of Wrexham, £67 6s. (third grant); Dr. W. V. Lyle, Western district of Paddington, £33 6s. (second award); Mr. E. E. Rawson, Thornton, near Bradford, £21 8s.

BEQUESTS, &C., TO MEDICAL CHARITIES.—The Great Northern Hospital has received a Bank of England note for £500 anonymously. The City of London Hospital for Diseases of the Chest, Victoria-park, has received a bank note for £500 anonymously. The Goldsmiths' Company have given £200 to the building fund of the Great Northern Hospital. Lord Farnham has given £2000 and the late Miss Batt £2000 towards the building fund of the Adelaide Hospital, Dublin.

Medical Appointments.

ALLEN, C. D., M.B., has been appointed Medical Officer and Public Vaccinator for the Bagenalstown Dispensary District of the Carlow Union, vice Trayer, resigned.

ASHE, L., M.D., has been appointed Physician-Superintendent and Governor of the Central Criminal Lunatic Asylum, Dundrum, vice MacCabe, appointed a Medical Inspector under the Local Government Board, Ireland.

BUTLER, P., L.R.C.S.I., L.K.Q.C.P.I., has been appointed House-Surgeon to the Queen Adelaide Dispensary, Bethnal-green, vice Boyd, resigned.

DAVIES, E. P., M.R.C.S.E., has been appointed a Surgeon to the Carmarthenshire Infirmary, vice Lloyd, deceased.

DIXON, J., M.D., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Parish of Bermondsey, vice Parker, resigned.

GIBSON, C., M.D., has been appointed Physician to the Infirmary for the Sick and Lame Poor of Newcastle-on-Tyne, Durham, and Northumberland.

JACOB, E. H., M.A., M.B., M.R.C.S., has been appointed House-Physician to the General Infirmary, Leeds.

KENDALL, W. B., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Kidsgrove Urban Sanitary District, vice Greatrex, whose appointment has expired.

MCNAB, W. R., M.D., has been appointed Lecturer on Botany at the Ledwich School of Anatomy, Medicine, and Surgery, Dublin, vice Maunsell, deceased.

MOIR, J., L.R.C.P.Ed., has been appointed Medical Officer for No. 6 District of the Clifton Union, vice Grace, whose appointment has expired.

OSBORNE, J. H., Junr., M.R.C.S.E., L.S.A.L., has been appointed Assistant Resident Medical Officer to the Nottingham Dispensary, vice White, appointed Resident Medical Officer.

PARSONS, W. A., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Warwick Union Workhouse, vice Bullock, resigned.

PORTER, G. H., M.D., F.R.C.S.I., has been appointed Consulting-Surgeon to St. Mark's Ophthalmic Hospital and Dispensary for Accidents and Diseases of the Eye and Ear, Dublin, vice Hamilton, deceased.

REDWOOD, T. H., M.D., L.R.C.P.L., M.R.C.S.E., has been reappointed Medical Officer of Health for the Rhymney Urban Sanitary District for twelve months.

RENDALL, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Maiden-Newton District of the Dorchester Union, vice R. M. Rendall, resigned.

RICHARDS, S. A., L.R.C.P.Ed., M.R.C.S.E., M. & L.S.A.L., has been appointed a District Surgeon to the Royal South London Dispensary, vice Graham, resigned.

SAUNDBY, R., M.B., M.R.C.S., has been appointed Resident Registrar and Pathologist to the General Hospital, Birmingham, vice Bindley, resigned.

SCOTT, W. L., F.C.S., has been reappointed Public Analyst for the Northern Division of Staffordshire for three months.

STACK, E. T., M.B., has been appointed Lecturer on the Institutes of Medicine at the Ledwich School of Anatomy, Medicine, and Surgery, Dublin.

STEPHENSON, S. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Killough Dispensary District of the Downpatrick Union, co. Down, vice Graham, resigned.

VERNON, W., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the Bardfield District of the Dunmow Union, vice Wood, resigned.

WEBB, C. F., M.R.C.P.Ed., M.R.C.S.E., has been reappointed Medical Officer of Health for the Basingstoke Urban Sanitary District, at £80 for one year.

WILCOX, W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the North Walsham Urban Sanitary District.

WILDING, J. L., M.R.C.S.E., L.S.A.L., has been appointed Resident House-Surgeon to the Whitehaven and West Cumberland Infirmary and Fever Hospital, vice Bourke, appointed Surgeon to the Clinical Hospital and Dispensary for Children, Manchester.

YOUNG, C. G., M.B., C.M., has been appointed Medical Officer of Health for the Oystermouth Urban Sanitary District, vice Hurley, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BUTTER.—On the 7th inst., at Lodway, near Bristol, the wife of George Bleeck Butter, F.R.C.S.Ed., of a daughter.

CRANE.—On the 1st inst., at Hallaton Grange, the wife of Charles A. Crane, M.D., of a son.

CRONIN.—On the 7th inst., at the Old Manor House, Clapham-common, the wife of Eugene F. Cronin, M.D., of a son.

CRUISE.—On the 27th ult., at Merrion-square West, Dublin, the wife of Francis R. Cruise, M.D., of a son.

WHEELER.—On the 6th inst., at Portland-place, Clapton, the wife of Henry Wheeler, L.R.C.P.L., of a son.

MARRIAGES.

COOMBE—PILKINGTON.—On the 6th inst., at St. Andrew's, Southport, George A. Coombe, M.R.C.S.E., to Mary Elizabeth, daughter of James Pilkington, Esq.

JARDINE—MONKHOUSE.—On the 30th ult., at St. Paul's, Grange-over-Sands, James Jardine, M.D., Surgeon-Major, Army, to Mary Elizabeth, daughter of Isaac Monkhouse, Esq.

DEATHS.

BROADFOOT.—On the 30th ult., at Whithorn, Wigtownshire, Robert Broadfoot, L.R.C.S.Ed., aged 81.

DONOVAN.—On the 27th ult., at Lower Leeson-street, Dublin, Michael Donovan, Surgeon, aged 85.

FULLAGAR.—On the 31st ult., at Leicester, Frank Fullagar, M.R.C.S.E., aged 64.

HIGGINBOTTOM.—On the 7th inst., at St. Alban's Villas, Nottingham, John Higginbottom, F.R.C.S.E., aged 67.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Prof. Tyndall: Fragments of Science.
Life and Letters of Lord Macaulay. Vols. I. and II.
Mr. Dowell: The History of Taxes.
Reproductive Disorders.
E. Cyon: Methodik der Physiologischen Experimente und Vivisection.
Messrs. Hummel and Brodribb: Lays from Latin Lyres.
Macalister: Introduction to Animal Morphology.
Mr. Turner: British Opium Policy.
Dr. Hamilton: A Treatise on Fractures and Dislocations.
Thos. Bryant: The Practice of Surgery. Vol. III.
Luther Holden: Landmarks, Medical and Surgical.
German and English Dictionary.
Quain's Anatomy. Eighth edition.
Dr. Playfair: The Science and Practice of Midwifery. Vols. I. and II.
York Powell: Early England.
Dr. Seguin: Medical Thermometry, &c.
Mr. Hinchcliff: Over the Sea and Far away.

Notes, Short Comments, and Answers to Correspondents.

MEDICAL MEN AS PUBLIC INFORMERS.

Mr. Geo. W. Rhodes, of Huddersfield, brings under our notice some provisions of a Bill promoted by the Corporation of Huddersfield for the improvement of the health of the town. One of these imposes very serious duties on medical practitioners, and requires them to be discharged "forthwith":—

"Every medical practitioner called in to visit or to attend on such inmate shall forthwith give notice to the said medical officer of the existence of such disease and of the nature thereof; and any person who shall offend against this enactment (unless ignorant thereof, the burden of the proof of which shall be on him) shall for every such offence be liable to a penalty not exceeding *ten* pounds."

We object to the Corporation imposing any such duties on the medical man. It is superfluous for them to do so, because in a previous paragraph it is provided that the occupier of a house shall, on becoming aware of the existence of a case of infectious or contagious sickness, give notice of the same to the medical officer of health. This is reasonable enough, and involves the duty of giving information to the friends on the part of the doctor in attendance. But to make the doctor a common informer is to exact a service from him for which the Corporation has provided no remuneration, and to which it has no claim. The duty of a doctor is to his patients; and it is clear that if, after diagnosing a case of infectious disease, he is "forthwith" to go to the medical officer of health and acquaint him with it, he may be very seriously embarrassed in the discharge of his proper duties.

Dr. Wilks is thanked. The matter shall be noticed next week.

FOOTBALL.

To the Editor of THE LANCET.

SIR,—Allow me to reply to your correspondent, "M.R.C.S.," that I mean by "picking up" the innovation on the Rugby game introduced by the Rugby union. The old Rugby rule is that you may handle the ball only when "fairly bounding." The Rugby union (because I believe some ill-conditioned persons persisted in disputing umpire decisions) legalised "picking up" the ball when rolling. They have thereby added to the danger of the game, and, in my opinion, utterly spoiled it.

I adhere to the old Rugby game, and I wish, Sir, that you could procure some statistics as to accidents at Rugby, where it has been played for at least half a century by hundreds of boys.

Your statistics about the Birmingham Club are certainly startling. I have never known anything so bad; but I must admit that the case of the Rugby union game for men versus the Association game is a very much weaker one than that of the Rugby game for schoolboys. Again, Sir, allow me to say that you do not quite fairly represent me when you say "arguments based on the sacrifice of life may be considered 'narrow.'"

I assert, first, that there will be *some* sacrifice of life and limb in any active occupation in which thousands engage; and, secondly, that what we have to regard is the *balance*. I assert that Rugby football, especially indirectly, *saves* more lives than it directly destroys or injures. There are accidents, perhaps fewer, at the Association game, too; but I think that the Rugby game shows a larger balance of good. I do not assert absolutely that I am right. I am groping for light on all questions which have to do with the chief duty of my profession, the successful rearing of young human animals. Many of my brethren care far more about various readings or the pronunciation of Latin; and inspectors of schools pronounce them "good" or "bad" by the paper work, and do not look at the complexion or measure the chest-girth of the boys. But just as there are more accidents from railway travelling than from coach travelling—and yet I believe the *percentage* of accidents was greater from the latter,—so the mere number of accidents, by itself, from Rugby football proves nothing. I believe, e. g., that if hockey were played by as many thousands its fatality would be greater. But we are all to some extent in the dark. If every schoolmaster would make careful observations, and if meetings of head masters would apply themselves to practical subjects, and not always have their heads full of examinations, we would, among us, turn a more vigorous and useful lot of men out into the world.

Just allow me to ask you, in conclusion, what punishment you propose to substitute for "corporal"? Impositions and all forms of "keeping in" are detestable. Boys should be out in their playhours; with the multifarious requirements of the day, these are not too long. Here, in almost every case, a boy may take a moderate "imposition" if he chooses from either master or prefect, and save himself a few minutes' smart; but this is very seldom done. Indeed at this school impositions are thought degrading, and caning is not. "Flogging" is certainly thought so; but it is only employed for lying or foul language.

You will do a great deal of good by opening your columns to the free discussion of similar subjects. Yours obediently,

April 5th, 1876. HEAD MASTER.

THE LAMBETH VESTRY AND ITS MEDICAL OFFICER.

WE shall be glad to be furnished with a public report of the proceedings of the vestry at the special meeting called to consider the matters in dispute between a section of the vestry and the medical officer of health.

Medicus.—It would be a pity to complicate the controversy by letters from third parties.

L.R.C.P.L.—Our correspondent is a much better judge than we can be of the question he submits to us. His position is that of a relative rather than of a responsible medical attendant, which makes the question of fees one of taste and not of law.

M. A. B.—It would appear to be well worthy of trial in the affection named.

STROMEYER.

WE have been favoured by an esteemed correspondent with the following account of the celebration of the anniversary of the day on which the illustrious Stromeyer obtained his degree. We regret that in consequence of its late arrival we have been unable to put it in a more prominent position.

Thursday, the 6th instant, was the fiftieth anniversary of the day on which Stromeyer received his degree of Doctor of Medicine and Surgery in the University of Berlin, and the occasion was made the subject of a demonstration of a most remarkable kind in honour of this veteran surgeon. Already, the evening before, a serenade was performed in front of Stromeyer's house by torch-light by a chorus of young men belonging to the town. But next day congratulations and every kind of honour a man could desire rained upon his head. First, the Empress of Germany sent an autograph letter, expressing her good wishes and esteem, and a beautiful turquoise Dresden vase with the Emperor's portrait enamelled upon it. Then, on the part of the Emperor, the Prince Albrecht of Prussia, General Commanding the district, came in person to pin on Stromeyer's breast, already covered with Orders, that of the Red Eagle of Prussia. The deputations from his fellow-citizens; from the various German Universities, Berlin, Bonn, Erlangen, Freiburg, Göttingen, Halle, Leipzig, München, Prague; official visits by various persons, as the President of the Province, Count Eulenburg, Herr von Beningen, the Speaker of the Prussian Parliament, came in rapid succession; lastly, the deputies from a distance, the only one requiring special mention being that from England, Dr. Little, Surgeon-Major Clarke, Mr. MacCormac, and Mr. Spencer Wells (who was unable to be present) had been asked on the part of the subscribers to present to Stromeyer an address from English physicians and surgeons, and to request Stromeyer to sit for a bust, which was afterwards to come to England. But the chief event in the programme was the great festival in the evening, at which some 300 were present. It took place in the handsome hall of the Bourse, and to the beautiful music of the band of the 3rd Regiment of the Prussian Guards. At a German dinner the toasts begin with the soup. Accordingly, no sooner was it served than Count Eulenburg stood up to give the toast, "Kaiser und König," but he coupled the loyal sentiments he expressed with a happy eulogy of Stromeyer. Then in succession, as the dinner proceeded, came the other toasts, the first after the Emperor being that of Stromeyer, proposed by Surgeon-General Berthold, who gave, in most fluent and apposite language, a sketch of the "Jubilar's" life. Stromeyer replied at considerable length, reviewing the conduct of his career, referring to Dr. Little, on whom he first practised the tenotomy of the tendo Achillis, which simple and brilliant application of surgery has saved thousands of limbs from amputation, and has been developed in the present day in so various directions; and, lastly, speaking of his younger friend, Mr. MacCormac, whose book he had translated into German. Every subsequent speaker, and there were many, alluded in some way or other, and in enthusiastic terms, to Stromeyer—Herr Beningen, the President of the Parliament, the Burgomeister, Herr Bodtentedt, the poet, and translator of the poem "Mirza Hafis," recited an ode of his own composition, and very beautiful it was. The whole strength of the company sang a gaudeamus, beginning—

Gaudeamus igitur
Juvenes de novo,
Non curamus senectutem,
Celebramus juventutem,
Iterum ab ovo.

But the speech of the evening was that of Professor Thiersch, of Leipzig. It was humorous and happy in the extreme. His reference to Stromeyer's habit of somewhat sharp criticism literally brought down the house. While affecting to criticise Stromeyer in this respect, and calling him an archer whose shafts sometimes went astray, as Tell's did when he shot Gesler, he really brought into relief the noble qualities which Stromeyer possessed, and concluded by saying the whole man must be judged and accepted as a whole. Professor Czerny, of Freiburg, gave the health of the English deputies, to which Dr. Little replied in well-chosen words. Surgeon-Major Schaper, Surgeon to Prince Albrecht, proposed the toast of English Military Surgery, to which Dr. Clarke responded; while Professor Thiersch insisted on Mr. MacCormac making a speech in German, and proposed his health specially for the purpose. He replied in a few words, which were well received by the company, and ended by repeating some lines of Bodenstedt's ode—

Die Bahn des echten Buhnes
Ist gross,
Muss man mehr sein als scheinen,
Nicht recht noch links vom Ziele sahn
Hoch über dem Gemeinen
Gross sein heisst gut sein, ohne Herz
Wird nie der Kopf genahelt.
Bleibt alle Kunst ein tönend Erz
Und eine klingende Schelle.

But it is really difficult to describe the goodwill and enthusiasm which prevailed, and made this festival the most remarkable ovation to the worth of a man which it is possible to imagine. During the day the telegraph office was occupied transmitting telegrams arriving from all parts, so many it was said had never before passed through the office in Hannover in one day. The mere enumeration of them after dinner had to be given up at last. But one must be mentioned—a greeting from Shanghai, which reached Stromeyer from his godson, Louis Stromeyer Little.

NEW MODE OF OBTAINING LOCAL ANÆSTHESIA.

M. LATAMENDI has found that when Richardson's apparatus is used, rubefaction and a sensation of cold is produced. If at this moment a slight incision of about half an inch is made with a curved bistoury, not deeper than the epidermis and the upper layer of the cutis, from the incised spot an anæmic zone is formed, which goes on spreading. If the ether spray is continued, the region becomes bloodless, and complete anæsthesia has been obtained. The knife cuts the part like butter, the spot resembling coagulated fat. Around this an annular patch is observed, which is not so completely anæmic as the centre. The spray directed upon this renders it also completely anæsthetic. Thus the anæmia can be extended in every direction, around and up the arm. If the spray be suspended, the effects disappear quickly; but, the spray being resumed, in a few seconds the ischæmia returns.

Parish Doctor.—Relieving officers only are authorised to grant orders. In urgent cases an overseer may give an order; but if the case is not urgent, it does not apply, and the overseer may be responsible to the medical man.

SALOP MEDICAL AID SOCIETY.

To the Editor of THE LANCET.

SIR,—The letter of the Committee in your last issue contains many misstatements, especially in regard to myself, and I shall be obliged if you will ive me the opportunity of correcting them.

The Committee open fire by saying that the statements of "Observer" are erroneous, and yet they do not deny those statements. They cannot deny that the salary of the medical officer was lowered because they had eliberately allowed their income to remain below their known and necessary liabilities, but attempt to justify the niggardly and unwise proceeding as preferable to running into debt, and quietly shunt the real question at issue—of whether it would not have been more equitable and judicious to have somewhat increased the members' contributions—by suggesting that £150 &c. is sufficient remuneration for the service required of their medical officer. They then state that I frequently complained of overwork, but that they never heard my brother say that he was overworked. My brother knew by my experience that complaining would bring no remedy. He also has a peculiarly happy temperament, which enables him to take things much as he finds them, and make the best of them; but on more than one occasion in my presence he remarked to members of the Committee that one man could not satisfactorily do what was required. Whilst speaking of my brother, I will also mention that the Committee are wrong in saying that I persuaded him to take the appointment. I purposely avoided even advising him one way or the other on the subject; but when he informed me that he was a candidate, I, of course, did what little I could for him in the matter. I can also state that he would have decided to remain in Shrewsbury in preference to embracing the opportunity of practising in London had the appointment in Shrewsbury been more desirable as regards duties and remuneration. The casual medical aid referred to by the Committee was instituted by themselves—my official superiors, not by me, their paid servant, and, contrary to the assertion of the Committee, it was the only item of business on which there was a gain instead of a loss, as far as it went. The statement in "Observer's" letter, to the effect that the first medical officer was given to understand that an assistant would be appointed in a few months, is correct; and had that understanding been acted upon, things would probably have progressed more to the satisfaction of the Committee, but would probably not have prevented the loss of guinea and half-guinea subscribers, so needlessly mourned by the Committee. I had to do with a few of these members, and after they had had out in medical aid many times more in value than their paid subscriptions, and not liking the necessarily rough-and-ready style of attendance, they ceased to trouble me. So far as my experience went of this class of members, they were a decided loss to the Society, and, being very well able to pay for medical aid in the usual way, were not fit persons for the membership of such an institution. With regard to my having given up the appointment for the purpose of entering upon private practice, I did so because I saw no prospect of improvement in my position at the Salop Medical Aid Society. The duties were a round of drudgery, compared with which the remuneration was very inadequate. Midwifery attendance is the next item unfairly represented by the Committee. During my tenure of office I attended over thirty cases, nearly all of them primaparous and instrumental (or otherwise "difficult"), on account of the prevalent practice amongst the poorer classes of not sending for a surgeon until the woman in attendance "has done her best"—that is, quietly allowed exhaustion to creep on. This was not a large number in itself, but sufficient to prove a serious hindrance to the regular work, much to the annoyance and dissatisfaction of expectant patients and their anxious friends. The inference of the Committee, that because they have succeeded in obtaining a medical officer at the reduced salary, that therefore the profession generally is satisfied with the remuneration of the office, is, I venture to say, contrary to fact. I cannot but think that the reduction by one-fourth of the hardly earned and already sufficiently moderate salary of their solitary medical officer, is an unnecessary and unwise step. The Committee are perhaps right in one entirely unimportant matter. The present system of the Shrewsbury Dispensary may not have come into force till after last Midsummer; but as "Observer" only referred to the *system* of that institution, the duration of its existence is of no consequence.

Your obedient servant,

THE PENULTIMATE MEDICAL OFFICER.

Shrewsbury, April 10th, 1876.

THE ROYAL BERKSHIRE HOSPITAL.

L.R.C.P., M.R.C.S.—Patients leaving this hospital are supplied with a form of expression of willingness to return public thanks to Almighty God, to be presented to the clergyman of the parish in which the patient resides, who reads over the same during one or more of the services ensuing. Such an announcement is not usual. Without judging it severely, we are disposed not to commend it. The expression of thanks on the part of a recovering patient should be spontaneous.

Mr. J. E. B. Burroughs.—The list is not yet out, and will not be for some time.

OPEN SURGERIES.

One Disgusted with them writes very strongly against open surgeries. We quite agree with him. They are entirely unworthy of the profession. A medical man, if he is worthy of his calling, is an expert. He has technical knowledge of disease and its remedies. This knowledge constitutes the article of value to the public in which he essentially deals. If, instead of vending knowledge, he takes to vending tooth-brushes and patent medicines and other medicines on the simple demand of the public, he ceases to be a medical man, and becomes a shopkeeper.

S.—Yes.

DEGREES IN MEDICINE AT CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—The letter of Professor Humphry in your issue of April 1st is both a liberal and remarkable concession upon the part of one of our oldest and most time-honoured Universities, as holding out the hand of encouragement to the members of an honourable and hard-working profession to obtain those recognitions and distinctions which should be attainable by knowledge, special skill, and culture alone by those registered medical practitioners of sufficient position and means who have, after qualifying elsewhere, devoted years of their lives to the higher and more practical study of their profession. That there is a very large class in the profession of active, hard-working men, who have made medicine, surgery, midwifery, and the collateral sciences matters of special study since their collegiate days of ten or twenty years ago, and who have worked hard to keep pace with the revolutionary progress of medicine since then, there cannot be a doubt; and that a large number of these men have a perfectly legitimate want, a means of publicly testing their knowledge and acquiring a degree in the higher medical sciences by examination alone, apart from any impracticable or impossible conditions of residence, age, &c., which will simply ruin them, is equally certain. Such a "hall-marking" is universally wanted, both by the better class of medical men and the more intelligent class of society, as a guarantee that a fair amount of intellectual work has been done, and pace kept with the progress of medical science by men since the acquirement of licences to practise. What guarantee have the public of the scientific knowledge of any medical man holding a diploma of twenty or thirty years ago? It naturally demands some more modern evidence of recent culture in the higher departments of medicine since those days, and medical men who have kept pace with it equally demand some means of publicly proving their knowledge, and becoming stamped, as it were, by a University authority. Such a means would be a public and professional boon, a blessing to society and to medical men. It would simply fill the remarkable vacancy of supplying a public stimulus to men to work and cultivate their profession after they have passed, and such a stimulus is now absolutely *not in existence*. The acquisition of a medical degree should be held out as a public reward for increased knowledge and work to the registered practitioner, obtainable by examination alone, and that examination should be so stringent that the public will be protected, and the dignity of the degree thoroughly upheld. To ask these men to go back to College lectures, tuition, or curricula which will involve residence, the loss of position, of (say) £1000 per year, and financial ruin, is simply a hideous mockery. Few men will be fools enough to get a University degree at such a sacrifice, and the consequence is that they either go without, and the culture and the benefit to society are lost, or they go to foreign Universities, where they are received with courtesy, allowed to pass by examination alone, and they come home and assume the title in the face of the authorities, who have neither the power nor the means to prevent them; for having acquired a place previously upon the Medical Register, they have fulfilled all that the law requires, and there is no legal remedy.

The Legislature has very wisely placed all the examining bodies upon an equal footing, and, apart from the Universities, *no residence* is required over and above the usual curriculum at some recognised hospital. Why should residence belong exclusively to the Universities, and why should it be enforced in the case of men who are by the Legislature registered, and consequently placed upon an equal footing with University graduates? Here the Universities lose ground. Let the difference be in the higher nature and degree of the examination, and then, *pari passu*, the Universities will keep pace with the other examining boards. But I only ask for residence to be abolished in the case of registered medical men of ten or twenty years' standing; in the case of youths without a qualification, enforce it. A difference, too, should be made in the two cases. A young man at twenty-one or twenty-two seeks a degree as a means of entering the profession and becoming qualified, and acquiring a position in society. A man at forty-five or fifty years of age seeks it as a proof of modern knowledge; already qualified and authorised, he can acquire few or no additional legal advantages. The one probably wants the degree for forty years; the other for ten or fifteen. Is it fair or equitable to ask the latter to go back to lectures, curricula, and ruin his social position to acquire a degree?

The University of Cambridge has publicly acknowledged the principle and importance in sanitary medicine. The same is equally or more wanted in curative medicine. Medicine is as important, and needs recognition, cultivation, and encouragement as much, as sanitary science. There is a public and perfectly legitimate demand for a thoroughly good University degree, obtained by examination, say of a well written and *viva voce*, with clinical tests in a public hospital, &c. &c., and this supply must be met to confer a public boon both upon the profession and the public, and to stop the supply of foreign graduates who are coming into the country, assuming degrees which are not authorised here, but which as long as the recipients are upon the Medical Register the Medical Council has no power to prevent.

I am, Sir, your obedient servant,

April, 1876. A PROFESSIONAL WORKING BEE.

JAMAICA.

WE are glad to see some admissions by Sir William Grey of the inadequacy of the pay of officers in the Government medical service. The article in the *Falmouth Post* on the subject is most reasonable.

L.R.C.P. Lond., &c., should communicate with the College whose diploma is so dishonoured by the proceedings disclosed in the letters sent us. The case is known to us; but only the College in question has power to deal with it.

Mr. O'Connor.—Consult a medical practitioner.

MIDWIVES' MIDWIFERY.

A MIDWIFE has been censured by a jury at Lincoln for not sending for a medical man in a case in which the placenta, according to the evidence of Mr. Rossiter and Mr. W. B. T. Hamlyn, had been adherent, and removed with violence. These gentlemen were called to see the deceased when she became ill, and they made a post-mortem, the particulars of which are not given in the newspaper report. The midwife, in giving evidence, said that the placenta came away naturally in twenty minutes. But she had given conflicting accounts of this part of the facts. The case is another illustration, not inopportune, of the incompetency of our midwives, and the necessity for legislation.

LUNATICS IN SCOTCH ASYLUMS: ENGLISH CERTIFICATES NOT VALID.

To the Editor of THE LANCET.

SIR,—Will you kindly publish the enclosed correspondence? If it be the case that lunatics cannot legally be admitted to Scottish asylums on the certificate of practitioners resident in England or Ireland, surely there is need for an alteration of the law.

I am, Sir, your obedient servant,
Carlisle, April, 1876. STEWART LOCKIE, M.D.

Carlisle, March 7th, 1876.

DEAR SIR,—One day last week the relatives of a patient of mine, contemplating her removal to the asylum at Dumfries, applied to you for the necessary documents. You were good enough to supply them immediately. On one of the papers sent there was a printed statement that the Sheriff of Dumfriesshire accepts the certificates of registered medical practitioners resident in England and Ireland. This statement, however, had been erased by pen or pencil, and an addition had been made in writing that certificates must be obtained on the patient's arrival at Dumfries (or words to that effect). On application to the sheriff, I learn that he does accept English certificates. I shall be glad to know, if you will be good enough to inform me, if it was by your authority that the erasure and addition were made, and if not, who is responsible for them.

As the question of the admission of patients into Scottish asylums on English certificates is one that involves the interests of all English practitioners, I reserve to myself the right of publishing this note, together with any reply you may favour me with, either by bringing them before a meeting of our Branch Medical Association or in the medical journals.

Believe me yours faithfully,
STEWART LOCKIE, M.D.

Dr. Gilchrist, Crichton Institution, Dumfries.

Crichton Royal Institution, Dumfries, March 14th, 1876.

DEAR SIR,—Yours awaited my return from sick-leave absence.

With reference to the legality of English and Irish certificates in the case of patients admitted to Scotch asylums, there has always been a difficulty with the Board of Lunacy. As, however, the Sheriff here disputed the Board's position and was quite prepared to grant warrants on such certificates, I had for some years admitted at once all such cases.

Latterly an English patient on English certificate complained to the Board of Lunacy of illegal detention. This brought the question once more before us, and on inquiring at the Board the ground of their opinion, they replied that a case had been submitted to Crown Counsel, with the result that such practice was illegal, and that the offending parties can be prosecuted at any moment.

Of course our hands are tied until something be done.

Some years ago I laid the matter before the Medical Council, got a polite answer, but nothing more. Yours truly,
Dr. Lockie, Carlisle. J. GILCHRIST.

YORK RURAL SANITARY AUTHORITY.

THE very remarkable proposal of Lord Wenloch, adopted by the Authority, in regard to the salary of the medical officer, shall be the subject of our attention next week.

GELSEMINUM SEMPERVIRENS.

To the Editor of THE LANCET.

SIR,—In your last issue one of your correspondents, "J. H. G.," asks whether the plant which has been in bloom in our gardens during the last month is the true Gelseminum sempervirens. I beg to inform him that the true Gelseminum sempervirens (Pers.) is by no means common in this country. It is absent even from the Royal Botanical Gardens of London and Dublin, and there is only a small plant of it in the Kew Gardens. Gelseminum sempervirens is not a jessamine at all, although popularly called so in America. It belongs to the natural order Loganiaceæ. There are several "yellow jessamines" cultivated in our gardens, which may be distinguished as follows:—Jasminum fruticans (L.), the common yellow jessamine; Jasminum humile (L.), the Italian jessamine; Jasminum revolutum (Sims), the curled-flowered jessamine; Jasminum nudiflorum (Lindl.), the winter-flowering jessamine. It is probably the last species which "J. H. G." refers to, as it flowers in the winter months, all the other species above mentioned flowering in the summer. Jasminum nudiflorum is easily known by the flowers appearing without the leaves. Gelseminum sempervirens is sometimes distinguished by gardeners as the Carolina jessamine; but this misuse of a familiar name is very apt to lead to confusion. It would be far better simply to call the plant "Gelseminum." For further particulars concerning Gelseminum sempervirens, "J. H. G." is referred to the *Pharmaceutical Journal* for Dec. 18th, 1875, p. 481, &c.—Yours truly,
E. M. HOLMES, F.L.S., Curator.

Pharmaceutical Society of Great Britain,
Bloomsbury-square, April 11th, 1876.

ARMY AND NAVY MEDICAL GUIDE.

To the Editor of THE LANCET.

SIR,—Can you or any of your correspondents kindly tell me in your columns, if you have no objection, if there be anything published in the shape of a Popular Guide to the Army or Navy Medical Services: something that tells of the life that army and navy medical officers lead? I should also be glad to know if there be any such work bearing upon medical life in other than the English services. Yours faithfully,
April 3rd, 1876. M.B.

THE FACULTY OF BORDEAUX.

THIS city had formerly only a secondary School of Medicine. The latter has lately been raised to the rank of a Faculty, and the Town Council have voted considerable sums of money for the necessary constructions.

Obstetricus.—We think not.

A RUMINATING HUMAN BEING.

To the Editor of THE LANCET.

SIR,—The stomach of man, from its simple construction as compared with the more complex stomachs of the Ruminantia, is not adapted for the purposes of rumination; yet something akin to that process does occasionally occur among the human species, as is evidenced in the subjoined notes of a case that has come under my observation.

H. W——, a carpenter and joiner, apprentice, though a sharp and intelligent young man, was always "a slow eater." In the struggle of existence he thus laboured under a serious disadvantage with his fellow-apprentices, when it is observed that, as a rule, a few minutes only had been allowed them for their meals by their exacting and ubiquitous taskmaster. Thrown on his beam-ends, and between the horns of a dreadful dilemma—to work hard and go with insufficient food, or to try to "bolt" and run a chance of being suffocated, were difficulties that the young carpenter had been left to choose from. With a natural dislike to hunger, and a discretion to be commended, he selected the latter course, and in process of time he learned to swallow his food right down in wholesale pieces without any attempt at mastication; for, be it remembered, the whole question turned upon that issue, and, *cæteris paribus*, the less time spent over the process the better for him.

Contrary to what might have been expected, the health of the amateur carpenter did not at all suffer from the apparent infringement of natural laws of which he was guilty. Nature, forsooth, as if beside herself, by a curious process of action, enabled her transgressor, as he worked with sinewy arm and brawny muscle at the workshop bench, to return to his mouth quantity after quantity, and morsel after morsel, of the food so hastily swallowed, there to be thoroughly masticated and impregnated with the fluids of the buccal cavity—"chewing of the cud," as I opine, each separate quantity and morsel of which had been in its turn swallowed and enjoyed *more* than on the first occasion.

The young carpenter, finished with his meal, usually repaired to his workshop without delay, and thereupon commenced handling the implements with which he fashioned into shape the materials of his craft. No sooner was this done than the regurgitation of the food commenced. As a rule, in ten or fifteen minutes after the meal was swallowed it was returned in mouthfuls at intervals of from five to ten minutes, to be remasticated, and again swallowed until the whole of the contents of the stomach had been similarly served, at which time the stomach rested from its action, and the abnormal process ceased.

Shortly after fifteen years of age, the time at which H. W—— entered on his apprenticeship, the regurgitation was first particularly noticed, but it might have occurred in a less marked degree previous to that time. For the succeeding fifteen years he invariably returned to his mouth all his food, or nearly all, until at length, as time rolled on, and as fortune and circumstances changed, he had more leisure for his meals, more time for primary mastication, if I may term it, and then this striking, novel, and supplementary process of nature became modified, and gave way in great part to the more usual, less complicated, and more natural method of preparing the food off-hand for admixture with the gastric juices, and for the processes of digestion and assimilation. But, "even at the present day," H. W—— writes, "when I take solid food and swallow it in a hurry, it is certain to return to my mouth to be remasticated, and it begins to return a few minutes after I finish eating; but I do not return it now habitually as I did in days gone by. When the food is well masticated it does not now return."

Although H. W——, who is now upwards of forty years of age, has to a great extent discarded his former habit of constant regurgitation of his food, he possesses at the present day a certain command over his stomach as peculiar as it is rare, which is perhaps best described in his own words: "From my infancy upwards I was able, without let or hindrance, without pain or inconvenience, to eject the contents of my stomach at will; I can empty it at any given moment of the day or night—in brief, I have absolute command over it at all times. After meals I can empty it, not only with the greatest ease, but also with a certain degree of pleasure."

Vomiting is usually a trying and painful feat to perform, and, so far as known to me, the process is generally regarded as involuntary. The act of deglutition is indeed cited as one of the most purely reflex in its character, because it is not capable of being performed or even controlled by a voluntary effort. In vomiting, the usual peristaltic movements of the œsophagus are only reversed, and the difficulty lies in the solution of the problem as to how vomiting can be performed in this instance at will. It is a well-known fact that there are striated as well as non-striated muscular fibres spread out on the stomach; but, on the other hand, we know that that important organ discharges its functions independent of our will both in a state of wakefulness and in sleep, and in good health without our consent or knowledge.

In a physiological point of view this case appears to me peculiarly interesting, as exemplifying the almost marvellous supplementary method by which nature accommodated herself to circumstances in establishing so unusual a process as second-rate mastication or rumination to meet urgent demands, and to avert mal-assimilation and its consequences; but the *modus operandi* is not quite so clear (considering that the œsophagus in its opening into the stomach is furnished with a sphincter muscle) by which the stomach was enabled, without any inconvenience to the individual in question, to return its contents quantity after quantity into the mouth.

And, again, the case is interesting because of the almost incredible power H. W—— possesses of ejecting the contents of his stomach at will.

What is still more remarkable remains to be told. H. W——, his unique rumination notwithstanding, left his implements to other hands than his own, and in process of time paved his rugged way to the heights of everlasting fame. He is now an ornament and a leading star in a noble profession; but, although I have repeatedly requested it, I am not permitted, Sir, to offer you his name and address for further reference if desired, for the reason, as he affirms, that he has no desire to be regarded during his lifetime as a "medical curiosity"; but I can give you the names of two other medical men who are intimately acquainted with the gentleman in question, and who are prepared to render corroborative evidence of the accuracy of my observations. Your obedient servant,
Southsea, March 9th, 1876. DANIEL MACKINTOSH, M.D., C.M.

A SILLY RECRUIT.

AT Vercelli, in Italy, a recruit was to be examined by a Military Board as to his fitness for the service. He swallowed a certain quantity of tobacco, probably so as to excite palpitations to be construed into disease of the heart. Two hours afterwards he died in agonising pain.

HYPODERMIC SYRINGE, NEEDLES, AND DISCS.

To the Editor of THE LANCET.

SIR,—The increasing importance of the hypodermic method of administering powerful remedies renders it desirable that the instrument we use for this purpose should possess two special qualities—portability and unfailing efficiency. Few care to carry with them at all times and seasons the little morocco cases which have hitherto been the usual adjuncts of the hypodermic syringe and needles; and most know how constantly the piston in these cases becomes dry and shrunken, and consequently unfit for use at the moment it is required. To obviate these disadvantages I have, with the aid of Mr. T. Hawksley, of Oxford-street, had constructed a hypodermic instrument, which I think will answer the purposes sought for.

In the first place, case and all, it is entirely made of *metal*, except, of course, the cylinder. The syringe, which occupies the centre of the metal case, is secured by a screw-cap, and thus being kept air-tight, the piston never becomes dry. The needles—six of which, of different sizes, can be carried—slip into a groove running round the cylinder case, and this groove being lubricated with fine oil, the needles are kept from rusting; these, too, are secured by a screw-cap. The whole instrument barely exceeds three inches in length. Moreover, either of the screw-caps is especially well adapted for facilitating the solution of the medicated gelatine discs now made by Messrs. Savory and Moore for hypodermic purposes; the cap holding the disc, and a sufficiency of water for its solution being placed in a saucer of hot water. Thus, with the portable syringe, its piston and needles always to be depended on, and a few of Savory and Moore's discs in his purse,* the practitioner may always have at hand the most potent means of relieving pain and suffering—so potent, that no remedial appliance we at present possess can vie with it in rapidity, certainty, and safety of action. I would add that Mr. Hawksley has taken great pains to make the needles as perfect as possible, both in temper and fineness, and that the use of such needles reduces to a minimum the slight pain consequent upon their introduction under the skin.

I remain, Sir, yours, &c.,
Ashton, Torquay, Feb. 28th, 1876. SPENCER THOMSON, M.D.

* Probably the syringe-case will be so arranged as to hold the discs.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Maunder, London; Mr. Spencer Watson, London; Dr. Storges, London; Dr. Harley, London; Mr. Groves, London; Mr. Stadderi, Dublin; Dr. Jonasson, Iceland; Dr. Holmes, Meerut; Mr. G. Prince, London; Mr. Treves, Northallerton; Dr. Lockie, Carlisle; Dr. Fairbanks, Wells; Mr. Cowan, Sharpness Point; Mr. Taylor, Nottingham; Dr. Munro, Cupar; Mr. Davis, Sherborne; Mr. Ingles, Cheltenham; Mr. Chick, Cosby; Mr. Heslop, Manchester; Mr. Knapton, Cambridge; Mr. Macpherson, Glasgow; Dr. Roosa, New York; Dr. Wilson, Glasgow; Dr. Maclagan, Dundee; Mr. Burroughs; Mr. Stevenson; Mr. Hunter, Reigate; Mr. Hollis, Brighton; Mr. Rhodes, Huddersfield; Mr. Lichtenberger, Stafford; Mr. Bisch, Kidderminster; Mr. Rawson, Thornton; Dr. Gelette, Paris; Dr. Tibbets, Bradford; Dr. Muscroft, Pontefract; Dr. Gibbes, Plymouth; Dr. Beales, Congleton; Mr. Grant, Birmingham; Dr. Blane, Poona; Dr. Wilks, London; Mr. Hunter, Aberdeen; Dr. Hardwicke, Sheffield; Mr. Armstrong, Newcastle; Mr. Nutt, Sherborne; Mr. W. H. T. Power; Dr. Will, Aberdeen; Dr. Davies, Wrexham; Dr. Buckell, Aston; Dr. Parsons, Goole; Dr. Lyle; Dr. Oulton, Bradford-on-Avon; Mr. Moore, Brentford; Mr. Cullen; Mr. Harburn; Dr. Fleming, Glasgow; Dr. Love, Wolverhampton; Dr. Wardell, Tunbridge; Dr. MacEwen, Glasgow; S. T. W.; La Travista; S.; L.R.C.P. & M.R.C.S.; The Registrar-General of Edinburgh; The Registrar of the Royal College of Physicians; Enquirer; The President of the Lincoln Medical Society; The Penultimate Medical Officer; M. W., London; The President of the Royal Microscopical Society; Medicus, Essex; H. B., Upper Norwood; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Ambler, Hemel Hempstead; Mr. Romane, Edinburgh; Dr. Glover, Shrewsbury; Dr. Drury, Harleston; Messrs. Kay and Smee, London; Miss Carty, London; Mr. Diamond, Muthill; Mr. Evans, Seaford; Dr. Fox, Bristol; Mr. Walker, Corwen; Mr. James, Talbach; Mr. Hyslop, Shrewsbury; Mr. R. S. Leggatt, Eastry; Mr. Stilliard, Birmingham; Dr. Churchward, Anerley; Dr. Gwynn, Whitchurch; Mr. Roberts, Haverfordwest; Messrs. Argles and Co., Maidstone; Mr. Evans, Welshpool; Mr. R. E. Smith, Hastings; Mr. Mills; M.R.C.S., Ventnor; Medicus, Cheltenham; A. H. P., Taunton; A. F., Nottingdale; Medicus, Coventry; F.R.S.; R. G., Barrow-in-Furness; M., Bradford; Candidat; A. B., London; M.D., Collumpton; X. Y. Z., London; A. D., Bury; N. P., Manningtree; H., Maidstone; W. P. S. B.; X. Y. Z.; P. G., Wigan; E. W., Wokingham.

Fifeshire Journal, Metropolitan, Birmingham Morning News, Surrey Advertiser, Western Morning News, Newcastle Daily Chronicle, Goole Times, Cork Constitution, Wrexham Advertiser, Manchester Guardian, Rugby Advertiser, Malton Messenger, Cashel Gazette, Rotherham Messenger, Brighton Examiner, East London Observer, and *Shrewsbury Chronicle* have been received.

METEOROLOGICAL READINGS

(Taken daily at 9 a.m. by Steward's Instruments.)

THE LANCET OFFICE, APRIL 12TH, 1876.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb.	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 9 A.M.
April 7	30·40	E.	40	51	...	64	50	...	Cloudy
,, 8	30·12	S.E.	49	53	...	71	44	...	Bright
,, 9	29·89	N.W.	50	58	...	71	47	...	Cloudy
,, 10	29·98	S.W.	49	52	...	53	47	0·06	Cloudy
,, 11	29·62	W.	37	41	...	52	35	0·26	Cloudy
,, 12	29·83	N.W.	33	37	...	...	33	...	Cloudy

Medical Diary for the ensuing Week.

Monday, April 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, April 18.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Injury to Head, with Chronic Hydrocephalus; Lardaceous Liver and Spleen; Meningitis; Pneumonia in Birds; Disease of Intervertebral Substance, with Psoas Abscess; Communication between Vermiform Appendix and Rectum; Tumour of Scalp growing in Sebaceous Cyst; Cystic Disease of Testis; Obturator Hernia causing Intestinal Obstruction; Bladder nine years after Lithotomy; Urinary Organs after Lithotrity; Ulceration of Intestine from Strangulated Hernia; Acute Aortitis causing Angina Pectoris; Malformed Heart; &c.

Wednesday, April 19.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, April 20.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Mr. Knowsley Thornton: "Notes on the Progress in the Diagnosis and Treatment of Ovarian Tumours. What remains still to be done?"

Friday, April 21.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, April 22.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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